DigVentures

Archaeological Investigations at Staleen and Oldbridge, Donore, Co. Meath

2023 Preliminary Archaeological Report

Dr Brendon Wilkins

With Dr Stephen Davis and Jonski Millar

Excavation Licence Number: 23E0005

Consent to use a Detection Device Licence Number: 23R0190

Archaeological Investigations at Staleen and Oldbridge, Donore, Co. Meath

2023 Preliminary Archaeological Report

Prepared on behalf of:

An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta

Department of Housing, Local Government and Heritage

Licence Number: 23E0005

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Purpose of document

This document has been prepared as a Preliminary Archaeological Report on survey and excavation at lands associated with Staleen House, Donore, Co. Meath, in the townlands of Staleen and Oldbridge, within the Brú Na Bóinne valley. The purpose of this document is to provide an interim report of the fieldwork undertaken between 3rd July 2023 and 17th July 2023 and to provide recommendations for future work. It is supported by an archive of written, drawn, photographic and digital data.

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Project summary

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The community research excavation was directed by Dr Brendon Wilkins, with Dr Steve Davis, UCD as Academic Lead. Project Management was undertaken for DigVentures by Jonski Millar, who also undertook Site Survey and Supervisor roles during fieldwork, along with logistics and landowner liaison. Nat Jackson fulfilled the role of Senior Site Supervisor, supported by Lisa Westcott Wilkins, Maiya Pina-Dacier, Anna van Nostrand, and Caroline Beason, providing additional supervisory support. The project benefitted hugely through the good spirited contribution of PhD, MA and post graduate students from UCD School of Archaeology, including Aidan Giblin, Mick Mongey, Joe Gallagher and David Doyle with Sam Kinirons, Ellie Swallow, Maurice McGuire, Eva Kurela, Wing Tung Leung (Zoe), Meaghan Mackie and Nora Nic Aodh.

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Executive summary/Abstract

This document has been compiled as an interim report for a community-based archaeological research excavation at Donore, County Meath. Fieldwork was undertaken as part of The Boyne Valley Research Project – a partnership led by DigVentures in collaboration with Dr Steve Davies, UCD School of Archaeology. The project builds on an earlier collaborative large-scale geophysical research project between the Romano-Germanic Commission (RGK), Frankfurt and UCD School of Archaeology. The Boyne Valley Research Project expands on this earlier initiative with a programme of small-scale, targeted field excavation, characterisation and community engagement, with the aim of building a rich, nuanced understanding of one of Europe's most significant prehistoric ceremonial landscapes.

Fieldwork took place between Monday, 3 July and Monday, 17 July 2023 investigating the extent, nature and significance of geophysical anomalies across three targeted trenches in the vicinity of the summit of Donore Hill, within the buffer zone of the World Heritage Site (Brú na Bóinne). Donore Hill has been a long-term focus for human activity at Brú na Bóinne, representing one of the most elevated locations within the wider Brú na Bóinne region, with commanding views across to the Dowth demesne and, in the middle distance, to Newgrange passage tomb. Three hand-dug trenches were excavated to explore and characterise geophysical survey results to address a combination of archaeological research and heritage management questions – Trench 1 and 2 in the northern area, and Trench 3 in the south.

Results summary

The purpose of Trench 1 (10 x 4 m) was to investigate geophysical anomalies denoting a small enclosure and potential demolished megalithic structure immediately adjacent to extant standing stone feature. The resulting excavation was a highly unusual mix of modern and prehistoric archaeology leading to a potentially unique artefactual discovery – an embossed brass plaque bearing what was essentially an excavation report from 1889, describing the discovery of a cist burial.

This artefact – archaeology of the archaeologists – has helped to shape a narrative sequence making sense of the disturbed mix of prehistoric and modern features. A decorated stone slab, potentially originating from a Neolithic chambered tomb, was reused as a capstone for a Bronze Age cist burial. The cist contained a single adult, interpreted as male in 1889, but as yet unverified, along with a decorated urn. Following repeated plough strikes, the farmer attempted removal of the stone – and once the archaeological nature of the site became evident, the cist was then excavated as a 'controlled' investigation under the patronage of Lt Col Coddington. Once the contents of the cist were removed, a stone, roofed structure was erected above to protect and display the site – remaining in place till at least 1909 when it was included on Ordnance Survey Meath Sheet 20 map. At some point between 1889 and the present, information relating to the site was lost or misplaced and no RMP entry was accurately created for the site.

Trench 2 (3 x 5 m) focussed on a possible post/pit alignment within the possible ritual complex, adjacent to the enclosure/structure. Trench 2 was located to intersect one of 35 similar likely pits identified in geophysical survey within a double-row. The pits appear to align towards Dowth Henge, sited 1 km away to the west-northwest. Two substantial features were identified in Trench 2 with an observable physical and stratigraphic relationship, and an alignment in keeping with the geophysical results. The earlier pit comprised a large, round, u-shaped cut into natural bedrock measuring 1.95 m by 1.2 m with a depth of 0.93 m. This had been

truncated by a later, partially undercut posthole, measuring 0.92 by 1.02 m and 0.95 m deep, containing several charcoal rich deposits and burnt bone.

Trench 3 (12 x 5 m) investigated a large, ditched enclosure with significantly elevated magnetic properties indicative of burnt material incorporated into a large enclosure feature. Geophysical, topographic and photogrammetric survey revealed the line of a potential Causewayed Enclosure following a visible break of slope around the top of Donore Hill – a natural feature likely to have been intentionally enhanced by the original monument-builders. The earliest feature in Trench 3 was the terminus of a substantial ditch [3002] cut into the natural bedrock, matched by a corresponding ditch terminus identified on the opposing side of the trench. These results were consistent with the geophysical survey and the character of a probable causewayed enclosure. Although no artefactual evidence was recovered from the feature, datable material was retrieved through palaeoenvironmental samples and is awaiting radiocarbon dating.

Artefacts and ecological samples are in storage and under analysis at UCD School of Archaeology, Dublin. The final report is anticipated to be completed, pending specialist contributions within the first quarter of 2024, and an article is in preparation for Archaeology Ireland, anticipated to be contained within the Spring 2024 issue.

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1 INTRODUCTION

1.1 Project background

1.1.1 This document has been compiled as an interim report for a community-based archaeological research excavation at Donore, County Meath. Fieldwork was undertaken as part of The Boyne Valley Research Project – a partnership led by DigVentures in collaboration with Dr Steve Davis, UCD School of Archaeology. The project builds on an earlier collaborative large-scale geophysical research project between the Romano-Germanic Commission (RGK), Frankfurt and UCD School of Archaeology, and INSTAR-funded work exploring the lidar data, satellite data and palaeoenvironments of Brú na Bóinne Bóinne (e.g., Davis et al. 2013; 2017; Davis et al. 2019; Rassmann et al. 2019, Davis and Rassman, 2021).

1.1.2 The Boyne Valley Research Project expands on this earlier initiative with a programme of small-scale, targeted field excavation, characterisation and community engagement, with the aim of building a rich, nuanced understanding of one of Europe's most significant prehistoric ceremonial landscapes. Fieldwork has been guided by the Heritage Council's Brú na Bóinne Research Framework (Smyth 2009), which has provided the rationale for surveys on the River Boyne itself, continued GIS and remote sensing work and crucially for attempting to place this information within its national and international archaeological context. The project has adopted a landscape level frame of analysis, focussing on the World Heritage Site buffer zone south of the river Boyne, characterising remote sensing anomalies through targeted interventions to determine the overall significance of features and their potential relationship to activity north of the river Boyne.

1.1.3 The first season of fieldwork focussed on a programme of intrusive and non-intrusive methods to explore two distinct areas on Donore Hill (a northern and southern area), with licences granted by the Department of Housing, Local Government and Heritage for excavation (23E0005) and consent to use a detection device (23R0190). The northern area comprised an unlisted standing stone at the top of Donore Hill (within Oldbridge townland), with the southern area defined by a large enclosure partially encompassing a recorded prehistoric lithic scatter (ME020-077) in Staleen townland. Geophysical results from both areas indicated potentially significant remains, comprising a possible small megalithic tomb at the north and causewayed enclosure at the south.

1.1.4 Three hand-dug trenches were excavated to explore and characterise geophysical survey results – Trench 1 and 2 in the northern area, and Trench 3 in the south. Trench 1 (10m x 4m) was positioned to investigate a series of anomalies comprising at least one enclosure and a small possible circular house or small demolished megalithic structure (ITM 704320.63,773879.82) on Donore Hill. Trench 2 (3m x 5m) focussed on a post/pit alignment adjacent to Trench 1, though likely relating to a separate phase of activity. Trench 3 (12 x 5m) investigated a large, ditched enclosure with significantly elevated magnetic properties indicative of incorporation of burned material. These interventions were supported by a programme of topographic survey and aerial photography and ground-based photogrammetry. A metal detection survey was

undertaken before, during and after excavation of all three trenches, to identify and recover any metallic finds from the plough soil, specifically anything originating from the Battle of the Boyne.

1.2 Site Location

1.2.1 The excavation areas (collectively described here as 'the site') were located within the townlands of Staleen and Oldbridge, County Meath in the Republic of Ireland, at the summit of Donore Hill, south of the River Boyne at approximately 94 m OD (Figures 1 and 2). Donore village is the closest settlement to the site, less than 1 km away, with Drogheda 3 km to the NW and Slane 8 km to the west of Donore Hill.

1.2.2 Donore Hill sits within the southern buffer zone of the Brú na Bóinne World Heritage Site, northeast of the present visitor centre. It is situated in an elevated, prominent location with clear lines of sight northward across Brú na Bóinne, especially over the Dowth estate and towards Newgrange. The underlying geology consists mainly of shales, sandstones, and limestones of the Donore Formation, with a smaller area designated as being of the Balrickard Formation to the west. Quaternary sediments are listed as rock outcrop, with the consequent depth of topsoil and subsoil variable to shallow.

2 ARCHAEOLOGICAL AND HISTORIC BACKGROUND

2.1 Historic background

2.1.1 Donore Hill has been a long-term focus for human activity since the first farmers arrived at Brú na Bóinne, and continued as a focus for settlement at least into the medieval period. It represents one of the most elevated locations within the wider Brú na Bóinne region, commanding extensive views across to the Dowth demesne and, in the middle distance, to Newgrange passage tomb. Dowth passage tomb is obscured by modern tree cover, as are the tombs currently under excavation at Dowth Hall; however, it is likely that in the Neolithic these would have been clearly visible.

2.1.2 The recorded archaeology of Donore Hill was, until recently, relatively sparse. The northern excavation area included a redundant record (ME020-078) hypothesized to belong to a well or similar structure. A scatter of lithics was reported by Claidhbh Gibney in the southern excavation area (ME020-077), including numerous undiagnostic struck flints (report currently in prep). The 2010 Boyne Valley INSTAR project identified a potential enclosure on the NW scarp of the hill (ME020-070 – Enclosure) while further south and west a series of features associated with medieval activity have been recorded, including a ringfort (ME020-067004), gatehouse (ME020-067001) and corn drying kiln (ME020-067004) (cf. Stephens 2009).

2.1.3 Recent geophysical surveys by RGK/UCD have identified a wealth of potential archaeological features on Donore Hill and wider vicinity. These include two early Neolithic rectangular houses; a post/pit alignment similar to one excavated by Moloney (2013) at Ballingowan, Co. Kerry (Figure 3); adjacent to this is a small, unrecorded greywacke standing stone; this forms part of a complex archaeological landscape including a partial enclosure, a small ring-ditch and some linear elements

most likely belonging to a prehistoric field system. A range of field systems of unusual curvilinear design are present to the north. To the south is a large, causewayed enclosure encompassing the lithic scatter site (Figure 4); at least one early medieval enclosure and a rectilinear enclosed area, possibly part of the grange farm excavated by Stephens (Stephens, 2009; Stout and Stout, 2022).

2.1.4 Geophysical survey at Donore Hill has identified early Neolithic activity (early houses) and a post alignment that is most likely late Neolithic or early Bronze Age in date. While the monumental complex north of the Boyne is well-defined and appears to incorporate a significant ritual element (e.g. Davis and Rassmann 2021), south of the river, for the most part, there are few clear ritual monuments. Conor Brady (e.g. Brady 2018) has demonstrated that there is significant activity south of the river, highlighted by scatters of lithic artefacts; however, at least from the middle Neolithic onwards the monumental complex seems very different north and south of the Boyne. Other likely prehistoric features identified south of the river suggests that, while not so intensively exploited as the landscape within the core area of the 'Bend', Donore Hill had its own trajectory as a ritual centre. The possibility that the large enclosure (ME020-077) represents an early prehistoric feature is particularly significant. If this proves to be the case, then Donore Hill would be a key locus in the early development of the Brú na Bóinne complex.

2.1.5 The Brú na Bóinne Research Framework highlights the possible role of Donore Hill in the Battle of the Boyne (Smyth 2009, 73), although this remains poorly understood. While fighting clearly took place around Donore (e.g., Murtagh 2006, 55; Brady et al. 2008) and the Hill itself has been highlighted as potentially significant location it remains unclear what role, if any, it actually played in the Battle of the Boyne.

2.2 Previous archaeological excavations

2.2.1 The archaeological potential of the Donore Hill landscape has long been recognised, both within the Research Framework (focused on later archaeology and the Battle of the Boyne) and through the work of the late Mandy Stephens (Stephens, 2022), who drew attention to the area and the potential for more archaeological discoveries upslope. Elevated areas in Meath, a lowland county, tend to attract prehistoric activity, so it would be no surprise to find significant prehistoric structures on the hilltop. However, despite the widely acknowledged potential, no archaeological interventions have been undertaken within the main area at the summit of the hill beyond ad hoc lithic collection. Lithic collection has taken place piecemeal and appears to incorporate a significant number of non-diagnostic flints.

2.2.2 While outside of the core area of the World Heritage Site, Donore Hill clearly encompasses a microcosm of much of the archaeological diversity seen north of the river Boyne. While it did not see the development of late Neolithic monumentality to the same extent that the Newgrange floodplain did, it does include monuments of early Neolithic date, probable Bronze Age structures, early and later medieval monuments including some quite novel features (e.g. curvilinear field systems; post alignment). Exploring some of these features can act as a mirror on the core area of Brú na Bóinne and provide new information regarding the development of the landscape north of the river, especially in early prehistory.

3 PROJECT AIMS AND OBJECTIVES

3.1 Project model

3.1.1 The overarching aim of the project was to build on the results of earlier geophysical survey work by defining and characterising key features through a programme of survey and excavation, obtaining data to improved understanding of the site. The research objectives of the planned fieldwork are outlined below, and a description of methods can be found in Section 4 and Appendix 1. A programme of non-intrusive investigations (topographic survey, aerial photography and photogrammetry modelling) and intrusive excavation (targeted archaeological intervention) was designed to define, characterise and evolve our understanding of the site by addressing the following aims and questions:

3.2 Research aims.

3.2.1 Aim 1 – Identify the physical extent and character of the archaeological remains at Donore Hill with a programme of remote sensing, topographic survey and photogrammetry.

Q1. Can the layout of the archaeological remains at Donore Hill be established by topographical survey and aerial survey?

Q2. Can we identify any phasing in remote sensing anomalies indicative of an extended period of use?

Q3. Do the anomalies reflect the wider development of the Brú na Bóinne WHS, especially in prehistory?

3.2.2 Aim 2 – Characterise the development history, chronology and phasing of the site through archaeological excavation.

Q4. Can we characterise the anomalies identified through geophysical survey, including the presence of Neolithic/EBA or earlier features and structures?

Q5. Can we confirm the presence of Neolithic/EBA remains and can a chronological sequence and stratigraphic phasing for the sites archaeological evidence be established?

Q6. Can we establish the landscape setting, use and character of the remains, and how these shaped its location, design and development?

3.2.3 Aim 3 – Understand the paleoenvironmental and archaeological conditions at the site.

Q7. What is the current state of preservation of the archaeological and palaeoenvironmental material across the site?

Q8. How well do deposits and artefacts survive, and how deeply are they buried?

Q9. Can the palaeoenvironmental data recovered from sampling in the trenches inform us about cultural activities that may have taken place at the site?

Q10. What is the range and spatial patterning of artefacts recovered from the archaeological trenches and test pits, also taking into consideration any results from pre-excavation metal-detection survey?

Q11. Can we establish a scientifically dated sequence for the site, including both cultural activities and landscape development?

3.2.4 Aim 4 - Making recommendations, analysis and publication.

Q12. What can an integrated synthesis of the results of this work with previous studies of contemporary regional sites tell us about the site and its setting?

Q13. Can we formulate recommendations for further archaeological and palaeoenvironmental analysis at the Site based on Aims 1-2, and implement a programme to publish and disseminate the results?

Q14. Can the results of our research feedback into the management of the wider Brú na Bóinne landscape?

3.2.5 The landowner is beginning the process to rewild the fields that comprise the study area, the project results will provide baseline information which can contribute to the future management of the landscape.

Aim 5 – Public engagement and communication

3.2.6 This aim is integral to the success of the project and sits with equal importance alongside our research aims. The excavation involved participation from field school attendees, who were trained and mentored in the techniques of archaeological excavation. Our site team delivered an in-person programme at a ratio of 1:4 throughout the dig, with online social media updates to engage and inform the public about the archaeological discoveries.

3.2.7 Over the course of the excavation, our targets for engagement were to:

- train 16 community participants in excavation and post excavation tasks
- broadcast online content across multiple social media channels
- host an online site tour and Q&A session with the project team, to be released after the dig has closed, reaching an expected 120 individuals and a global online community.

4 METHODOLOGY

4.1 Topographic survey and GIS modelling

4.1.1 Topographical survey work was carried out using a Trimble Real Time Differential GPS survey system. The Trimble VRS system is used in conjunction with a GPS Rover unit. It allows for surveying without the use of a site specific fixed base station. This is achieved by connecting to Trimble's network of fixed base stations by means of mobile phone communication. This method is highly efficient and accurate (+/- 2cm) when good signal is available. The survey data is exported from the data logger as a comma delimited file (csv) and a Trimble data collector file (dc). Either of these files can be imported into Trimble GeoSite Communicator, which recognises the feature code library and plots all strings, polygons and labels as intended. All survey and excavation data was stored within a GIS environment, which will remain the principle conduit for all spatial data throughout the project. Survey was undertaken to standards identified in best practice guidance, including Guidelines for Archaeologists, Institute of Archaeologists of Ireland (2013) and Policy and Guidelines on Archaeological Excavation, Department of Arts, Heritage, Gaeltacht and the Islands (DAHGI 1999b).

4.2 Archaeological excavation

4.2.1 Prior to excavation, a metal detection survey was completed at each trench location. The survey area was walked by an experienced metal detectorist in parallel transects and aimed to locate find spots and identify any clusters of archaeological activity within the site. A Garrett Ace 300 detector was utilised, capable of scanning the ground with multiple frequency transmission and coil-to-detector data communication to find more targets in variable ground conditions. The detector had an expected depth sensitivity of up to 10 inches below the surface of the soil. No significant finds were recovered during the metal detection survey, but had they been recovered, significant finds would have been assigned a small find number and the location of the find marked with a flag. At the end of the survey, the coordinates of all of the significant metal-find spots would have been recorded using a Trimble R10 GPS, with an accuracy of <0.02m. Following recovery of a metal object from the ground, the area was scanned again to assess for further signals before reinstating.

4.2.2 The project study area lies within the catchment for the Battle of the Boyne landscape and bears increased potential for artefacts, ecofacts and remains associated with the battle to survive within the soil. In addition to pre-excavation survey, excavated soils were also subject to metal detection analysis throughout the fieldwork process and the spoil heaps were periodically re-surveyed.

4.2.3 The study area also lies within the southern buffer zone of the UNESCO World Heritage Site (WHS) of Brú Na Bóinne – Archaeological Ensemble of the Bend of the Boyne. In respect of the significance of the surrounding landscape and the potential significance of the monuments being studied, all deposits were sieved using a combination of A-frame large sieves (1 cm grade), rotary sieves (0.75 cm grade) and hand sieves (1 cm - 0.5 cm grade). 100% of soil from features was sieved and between 25% and 50% of all other excavated deposits were sieved .

4.2.4 All trenches were excavated by hand from initial turf-cutting to fine cleaning and feature excavation to preserve the greatest possible amount of information. Turf was carefully stacked and kept separate from subsoils and was replaced upon the completion of fieldwork. Infilling was undertaken using a 4WD teleporter with flat-bladed bucket under archaeological supervision. Geotextile was used to identify and protect the cleaned archaeological horizons prior to back-filling.

4.2.5 Three trenches were opened to investigate anomalies identified in past geophysical surveys (see Section 2). Turf and topsoil were removed by hand and all trenches were then cleaned, planned and photographed prior to further excavation with excavated deposits being methodically dry-sieved during the fieldwork process to maximise the potential for finds retrieval (see section 4.5.1). A representative section of the entire deposit sequence encountered was recorded. Interventions focused on feature intersections in order to establish relative chronologies, and 'clean' sections to maximise retrieval of stratigraphically secure dating evidence and environmental samples.

4.2.6 A single context recording system was used to record the deposits, and a full list of all records is presented in Appendix 1. Layers and fills are recorded (001). The cut of the feature is shown [001]. Each number has been attributed to a specific trench with the primary number(s) relating to specific trenches (i.e. Trench 1, 1001+, Trench 2, 2001+). Full written, drawn and photographic records were made of each trench. Plans at a scale of 1:50 were prepared, showing the areas investigated and the location of contexts observed and recorded during the investigation. Sections and elevations of archaeological features and deposits were drawn as necessary at an appropriate scale (1:20 or 1:10).

4.2.7 Drawings were made in pencil on permanent drafting film. Digital photography was used for all photography of significant features, finds, deposits and general site working. The photographic record illustrates both the detail and the general context of the principal features and finds excavated, and the Site as a whole. The drawn and photographic record was supported by 3D photogrammetric recording throughout the different stages of the excavation as required, producing orthorectified imagery of significant deposits and features, mid-excavation and post-excavation final trench plans.

4.3 Paleoenvironmental sampling

4.3.1 All deposits with good palaeoenvironmental potential were sampled; context specific bulk samples were taken as appropriate under advisement from the project specialists and in accordance with the selection and categorisation criteria detailed in appendix 1 of the project design and Method Statement (Wilkins et al. 2022). All aspects of the collection, selection, processing, assessment and reporting on the environmental archaeology component of the evaluation was undertaken in accordance with the principles set out in NMI (2022), from sampling and recovery to post-excavation.

4.3.2 The samples were processed using a standard flotation tank at UCD School of Archaeology. Floating material was collected in a 250µm sieve, with residues captured in a 0.5 mm mesh. The vast majority of charred material appeared to float from these samples, but where it did not this was extracted from the air-dried residues and

recombined with the charcoal for analysis. Residues were also screened for artefacts, resulting in some small chips of flint and one possible piece of worked quartz.

4.3.3 Preliminary assessment of flots using a binocular microscope suggests that most if not all of the burned material is charcoal with few if any plant macrofossil remains. Some possible fragments of hazelnut shell were noted but these have been left to the specialist for comment.

4.3.4 Dry weight of charcoal from samples is noted below. Some of the fills of the recut at Trench 2 were very charcoal rich and provide plentiful material for dating. Licenses for alter and export have been granted and the samples are all with Dr Lorna O'Donnell for analysis.

Table 1. Charcoal Samples

Context	Sample	Weight (g)	
1004	8	1.5	Fill of ditch [1007]
1006	14	<1	Fill of ditch [1007]
2005	1	16	Fill of pit recut [2004]
2006	2	14	Main fill of pit recut [2004]
2007	3	1	Lower fill of pit recut [2004]
2011	13	<1	Original cut of big pit [2010]
2014	14	2.5	Secondary pit
3009	12	<1	Fill of ditch [3008]
3014	9	1	Silting within ditch [3008]
3017	10	<1	Spread of possible burning
3019	11	3	Spread of possible burning

4.4 Artefacts

4.4.1 Finds were treated in accordance with the relevant guidance given in the Guidelines for Archaeologists, Institute of Archaeologists of Ireland (2013), the Chartered Institute for Archaeologist's *Standard and guidance for archaeological field evaluation* (revised 2014a), and the *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (2014b), excepting where they were superseded by statements made below. Archaeological material was handled and sorted following advice in Watkinson and Neal (1998). All artefacts from excavated contexts were washed, counted, weighed, and identified. Finds recovered were assessed by appropriately qualified specialists, who examined the finds to provide an identification, date, and provenance of the material, and to also evaluate the significance of the assemblage.

4.4.2 Human Remains

The majority of the bone (except for the smaller unidentified long bone fragments), was washed by hand in lukewarm water with a soft brush and dried before analysis. The remains were macroscopically analysed and any pathological changes, age/sex

characteristics were recorded and an MNI established. See Appendix A for a detailed description of the bone found.

4.4.3 Pottery

Pottery was initially left to dry at room temperature in perforated bags, then gently washed under running water using a soft paintbrush. Sherds were then dried at room temperature, rebagged and passed to the specialist (Helen Roche) for analysis.

4.4.4 Lithics

Lithic material was gently washed under running warm water using a soft brush. Lithics were re-bagged in perforated plastic sample bags to allow them to dry prior to specialist analysis.

4.5 Finds and sample retrieval

4.5.1 Finds were treated in accordance with the relevant guidance given in NMI (2022), the CIfA (2014) and DoHLGH (1999), excepting where statements made below supersede them. All artefacts were retained from excavated contexts, except deposits undoubtedly of modern date. In these circumstances sufficient artefacts were only retained to elucidate the date and function of the feature or deposit. All deposits excavated during the project were sieved by hand using an A-frame soil riddle with a 1cm gauge mesh. Spoil was also subject to metal detector survey (see 4.2.2 above). All artefacts from the excavation works will, as a minimum, be washed, marked, counted, weighed and identified. Detailed methodological statements for specific finds are given in Appendix 1.

4.5.2 This site-specific retrieval strategy was devised to allow for a range of artefacts and human remains being recovered and requiring first aid for finds and immediate care and conservation. Suzannah Kelly, UCD was retained as conservator for the project and was available for the duration of the fieldwork should anything of particular significance have been uncovered.

4.6 Artefact and sample storage

4.6.1 Finds and all samples were temporarily stored in a locked facility during fieldwork. Finds and archaeological samples were removed to office accommodation at UCD School of Archaeology at the completion of fieldwork. Post excavation analysis and conservation will be undertaken primarily by Susannah Kelly at UCD. A list of specialists associated with the project is listed in section 5.2 and Table 3 below. On the completion of the research project and post excavation work, all artefacts associated with the project will be transferred to the National Museum of Ireland in accordance with recommendations and guidelines within.

4.6.2 All terrestrial soil samples have been transported to UCD School of Archaeology and are held in essential cold storage. Samples will be assessed for ecofactual potential and analysed following appropriate methods, determined by specialist advice. Given the dryland nature of the sites this is likely to comprise charred material (charcoal; plant macrofossil remains) only. After all analytical processes have been conducted

the remaining sediment will be temporarily archived at UCD School of Archaeology. Any material recommended for long-term preservation will be retained as part of the project archive and will be transferred to the National Museum of Ireland.

4.7 Post-excavation proposals and publication recommendations

4.7.1 An article has been prepared for Archaeology Ireland, anticipated to be contained within the Spring 2024 issue. Additional papers will be prepared and disseminated during 2024. The final report is anticipated to be completed, pending specialist contributions within the first quarter of 2024. Artefacts and ecological samples are in storage and under analysis at UCD School of Archaeology, Dublin. The paper archives have been digitised and are stored online (Dropbox) within DigVentures corporate account.

5 EXCAVATION RESULTS

5.1 Overview

5.1.1 Three trenches were excavated during fieldwork (Figures 1 to 6). Trenches 1 and 2 were situated within Oldbridge townland, in the north of the study area. Trench 3 was situated on the upper slopes of Donore Hill, within Staleen townland. Licence permission was granted to excavate four trenches, including two equal-sized interventions crossing the interpreted geophysical survey results of a possible causewayed enclosure. Upon commencement of hand-excavation, the soil depths at Staleen were found to be deeper than expected and the decision was made to limit the project to a single trench investigating the causewayed enclosure. Trench 3 was positioned to hit one or more termini on the potential causewayed enclosure, addressing the research goals of the original licence application.

5.1.2 Significant features were identified, cleaned and recorded in all the locations suggested by the geophysical survey, verifying the accuracy and effectiveness of the survey techniques employed.

5.2 Metal Detection Survey

5.2.1 Due to the proposed study area lying within the landscape of the Battle of the Boyne, all trenches were comprehensively metal detected by an experienced archaeologist trained in the use of detection devices prior to the commencement of topsoil stripping, in addition any spoil arising from the excavation was similarly studied and surveyed. The detection device survey was undertaken using a Garrett Ace 300 metal detection device (section 4.2.1). The metal detecting survey covered approximately 175 msq of ground (the area encompassing initially proposed intrusive excavation). A specific Detection Device Consent licence was applied for in advance of the project and was granted (23R0190).

5.2.2 A variety of modern debris was recovered as a result of the metal detection exercise, particularly within the area of Trench 1 which quickly proved to be a focus of late 18th and 19th century activity. A concentration of building materials and debris were identified during the survey within the turf and topsoil in the immediate locality of the

standing stone and stony mound. These included nails, cast-iron guttering fragments and other waste materials. The working hypothesis was that either a structure had stood on the site or it had been used as a dumping ground for building material. No metal artefacts of archaeological significance were recovered from any of the three proposed trench sites during the pre-excavation metal detection survey. No items or artefacts relating to the Battle of the Boyne were recovered at any point during the course of the excavation.

5.3 Trench 1

5.3.1 Trench 1 was a highly unusual mix of modern and prehistoric archaeology leading to a potentially unique artefactual discovery of significant contemporary public interest. In consequence this section will focus on the daily sequence of excavation events in as much detail as the actual excavated stratigraphic sequence.

5.3.2 Trench 1 (10m x 4m) was situated at an elevation of 92.3 to 92.5 m AOD on the highest point within the local landscape, the land sloped gently away from the trench in all directions, steepest to the north. Excavation began on Monday July 3rd 2023, following a detailed metal detection survey. The original purpose of the trench was to investigate geophysical anomalies denoting a small enclosure and potential demolished megalithic structure immediately adjacent to extant standing stone feature (ITM 704320.63,773879.82).

5.3.3 Turf was removed by hand, revealing a mid-greyish brown sandy silt topsoil (1001), dry and friable with moderate small to large very angular rubble. Immediately upon the removal of turf and vegetation, a sub-square stone foundation or wall (1002) was identified, and was subsequently cleaned by hand (Figures 6 and 7). The structure measured 2.58 m NW-SE by 2.77 m SW-NE in external dimensions, with 0.5 m thick walls on average. The standing stone was seen to be roughly embedded within the structure, the centre of which had been infilled with hardcore or loose concrete and rubble in order to wedge the stone upright (1003) (Plate 1). A possible entrance was identified on the SE facing elevation, with a substantial dressed limestone lintel with iron hinge furnishing identified fallen within the likely opening. Concrete and cast-iron drainage features around the building were identified, suggesting a degree of care and attention had been invested in its construction.

5.3.4 Contexts (1003), (1005) and (1009) were excavated from within structure (1002) (Plate 4) and contained a number of interesting modern objects, including a metal door lock, quantities of roofing slate, glass bottles, nails and other construction materials including bits of timber – possible door-frame and door components. The fabric of the structure and associated deposits were evidently modern, leading to initial speculation of function as a disused well, shepherd's hut or possibly a Hedge School (the latter due to the fieldname Loc-a-wanny) mentioned in the Duchas School's Collection for Donore. All was revealed, however, when an embossed brass plaque was retrieved from context (1005), bearing what was essentially an excavation report from 1889, describing the discovery of a cist burial and its contents (Plate 2 and 3).

5.3.5 The plaque measured 240 mm x 208 mm, fabricated from an approximately 1.5 mm thick sheet of copper alloy (Brass), with a circular hanging ring rivetted to the top centre and bearing 17 lines of hammer-and-die embossed capitalized text. Somewhat

conveniently, it described the excavation, recovery and character of the cist uncovered in 1889, a transcript of which is provided below (with capitals inserted to indicate breaks in narrative).

"This cyst was discovered on Dec 20 1889 when taking away some rocks which interfered with the plough. In the SW corner the upper part of a skull without teeth was found and close to it an unburnt urn on its side partly and decayed with some burnt ashes in it which are now in possession of Lt Col Coddington. Oldbridge. Six large bones probably those of the legs and arms with some portions of smaller ones were placed on top of each other in the centre of the cyst. Dimensions are length 3 ft 2 in width 1 ft 10 in depth 1 ft 6 in Marks of fire were observed on the top and sides A large green Tullyescar flag covered all Supposed date between 500 years before Christ and 200 after"

5.3.6 Though not entirely without interpretive issue, this 'archaeology of the archaeologists' provided a vital reference point, enabling the site supervisor (Caroline Beeson) to download a published article from JStor by the original excavator (Haddon 1896-8) a mere minutes after the plaques discovery. The original excavation identified the remains of at least one human and a decorated urn, later removed to Oldbridge House, with the subsequent presentation/preservation of the site within a purpose-built structure, with a lockable door and educational plaque to inform visitors.

5.3.7 This additional 'digital context' layer helped to shape a narrative sequence making sense of the disturbed mix of prehistoric and modern features. A decorated stone slab, potentially originating from a Neolithic chambered tomb, was reused as a capstone for a Bronze Age cist burial. The cist contained a single adult, interpreted as male in 1889, but as yet unverified, along with a decorated urn. Following repeated plough strikes, the farmer attempted removal of the stone – and once the archaeological nature of the site became evident, the cist was then excavated as a 'controlled' investigation under the patronage of Lt Col Coddington. Once the contents of the cist were removed, a stone, roofed structure was erected above to protect and display the site – remaining in place till at least 1909 when it was included on Ordnance Survey Meath Sheet 20 map (Figure 2). At some point between 1889 and the present, information relating to the site was lost or misplaced and no RMP entry was accurately created for the site. A number was allocated to the standing stone (ME020-078----), but in the wrong location and with incorrect/incomplete description – a misallocation that can now be corrected and updated (Figure 2).

5.3.8 Following the discovery of the plaque and the ensuing excitement and disbelief on site, excavation within the structure (1002) continued, further removing modern demolition deposit (1009). At a depth of 0.5 m below the surface, the stone sides of the cist (1010) were identified surviving in-situ, along with a small quantity of disarticulated human bone and teeth within the infilling context (1008) (Figure 7 section, Plate 4). The cist was aligned NE-SW and was constructed from large, unbonded slabs of stone, set into the natural drift geology, and measuring 0.75 m by 0.78 m and was 0.2 m deep – consistent with the imperial measurements given on the plaque.

5.3.9 The authorities were alerted to the presence of human remains in accordance with IAI treatment of Human Remains, with a visit by An Garda Síochána was arranged and completed (on 17th July 2023, at 11am). Samples were taken of all key primary deposits and the human bone was collected for analysis. In addition to the human remains, the deposit also contained bones from a hare and a bird, possibly a corvid (Erin Crowley, pers. comm.).

5.3.10 The enclosure ditch which was identified on magnetometer geophysical survey data (Figure 3) and assumed to be associated with the cist burial [1007] which it appear to enclose, was filled with two distinct contexts, a stony upper fill (1004) and charcoal rich lower fill (1006) (Figure 8, Plate 5). The ditch produced a moderate quantity of Bronze Age pottery sherds – some diagnostic and decorated – provisional analysis by Helen Roche indicates the pottery in the ditch post-dates the urn in the cist (Helen Roche, pers.. comm). Samples from the fill of the ditch were taken for palaeoenvironmental analysis. The ditch crossed the trench from edge to edge, with a total length of 3.2 m being excavated. The ditch [1007] was 0.96 to 0.99 m wide, with gradual break of slope at the upper extent and a sharply tapered base. The density of artefacts recovered from the southern half of Trench 1 was the highest experienced across the three trenches by a significant margin. A total of 92 small finds were recorded within Trench 1, out of a total 113 small finds identified across the project. Many of these are very small 'pot-lid fractures' flints - typical of burned/cremated flint.

5.4 Trench 2

5.4.1 Trench 2 (3m x 5m) focussed on a possible post/pit alignment within the possible ritual complex, adjacent to the enclosure/structure. Trench 2 was located to intersect one of 35 similar likely pits identified in geophysical survey within a double-row. The pits appear to align towards Dowth Henge, sited 1 km away to the west-northwest. Centred on ITM 304378.065, 273849.799, Trench 2 measured 3 m WNW-ESE and 5.3 m NNE-SSW. The average excavated depth of trench 2 was 0.3 m and the trench was situated at an elevation of 92.03 – 91.75 m AOD on elevated former pasture, now fallow, forming a roughly level plateau.

5.4.2 Topsoil was a mid-greyish brown sandy silt (2001), observed as a firm, dry and friable layer with moderate small sub-angular stones, extending to a maximum depth of 0.3 m, consistent with light agricultural ploughing. Faint plough marks were observed in the soil interfaces, running roughly n-s. The topsoil sealed a layer of subsoil (2002) into which a number of negative features were seen to be cut. Definition of undisturbed subsoil/natural (2003) was challenging, the subsoil was exceptionally hard and compact and the only definitively 'natural' deposits that could be confirmed with absolute certainty were patches of natural friable shale bedrock which turned to delaminated flakes / powder on firm contact.

5.4.3 Two significant features were identified in Trench 2 with an observable physical and stratigraphic relationship (Figures 8 and 9) . The earlier feature was a large pit [2010], truncated by a posthole [2004]; this roughly N-S aligned pit complex was cut into subsoil (2002) (Plate 6). The earlier pit [2010] comprised a large, round, u-shaped cut into natural bedrock measuring 1.95 m by 1.2 m with a depth of 0.93 m. This pit had been infilled with an orangey brown clayey silt (2011) which was very dry and firm with

evenly distributed, occasional small to medium sub-angular to sub-rounded spheroidal pebbles, and evenly distributed, occasional flecks to small sub-angular to sub-rounded elongate charcoal fragments. A discrete basal fill or slump (2015) was identified within the earlier pit cut [2010], at northern end extending from the first archaeological horizon to the base of the cut. The fill comprised a light brownish yellow silty clay, dry and firm in compaction with evenly distributed flecks of charcoal. The maximum depth of the deposit was 0.9 m, the maximum observed width (in section) was 0.3 m.

5.4.4 This pit feature had been truncated by a later, partially undercut posthole, measuring 0.92 by 1.02 m and 0.95 m deep (Plate 7). This later feature contained three fills (2005, 2006 and 2007) all comprising mid to dark greyish brown to black silts. Flecks of burnt bone were identified within the upper layer (2005) with substantial quantities of charcoal also identified in primary deposit (2006). The pit complex [2004] and [2010] were located in a consistent location with the geophysical survey results for the pit alignment and were comparable in size to the expected results based on the survey data. Samples of charcoal recovered from the site have been progressed for C14 dates.

5.4.5 Two other small pits were also excavated in Trench 2. A sub-circular pit [2008] was excavated to a maximum depth of 0.2 m and contained a single fill (2209) with no artefacts or evidence for form or purpose. A sub-circular pit [2012] was also excavated to a depth of 0.33 m with two fills (2013 and 2014) and similarly contained no diagnostic artefactual evidence to indicate purpose. Three similarly sized and shaped pits were also identified in the southern part of Trench 2, though these were not excavated due to time constraints imposed by inclement weather (Figure 8). These included circular pit [2016] with fill (2017) (Plate 8), circular pit [2018] with fill (2019) and circular pit [2020] with fill (2021). All three appeared to be approximately 0.75 m in diameter and were consistent with geophysical anomalies visible on the magnetometer survey, suggesting a double row of smaller pits forming a cordon or perimeter around the larger features of the primary alignment.

5.5 Trench 3

5.5.1 Trench 3 (12 x 5m) investigated a large, ditched enclosure with significantly elevated magnetic properties indicative of burnt material incorporated into a large enclosure feature. Geophysical, topographic and photogrammetric survey revealed the line of a potential Causewayed Enclosure following a visible break of slope around the top of Donore Hill – a natural feature likely to have been intentionally enhanced by the original monument-builders. The trench was therefore carefully positioned to explore a probable terminus and gap between two component ditch features (Figure 4), providing dating and characterising evidence for what could potentially be one of the earliest monuments in the WHS.

5.5.2 Centred on ITM 304048.427, 273130.414, Trench 3 measured 5 m NW-SE and 10 m SW-NE. Turf was removed by hand, following a detailed metal detection survey, with the excavated trench recorded by photogrammetry as a 3D model (Figure 10). The average excavated depth of Trench 3 was 0.3 m and the trench was situated at an elevation of 85.52 and 83.86 m AOD on moderately sloping ground, downslope to

the SW, with impressive views to the west and north west across the Brú na Bóinne valley.

5.5.3 Topsoil was recorded as a mid-greyish brown sandy silt (3001), dry and friable with moderate small sub-angular stones, overlaying an undisturbed archaeological horizon of negative cut features and associated surface layers. All small finds recovered from Trench 3 were found within (3001) and were primarily pieces of worked and unworked flints. A few elaborate and delicately worked pieces of flint were recovered and are pending specialist analysis.

5.5.4 The earliest feature in Trench 3 was the terminus of a substantial ditch [3002] cut into the natural bedrock and running N-S from the northern extent of Trench 3 towards the south (Figures 10 and 11, Plates 9, 10). The ditch was 3.15 m wide from E-W, extending into the trench by at least 1.5 m, and excavated to a maximum depth of 0.78 m. The primary fill was a bright orangey brown medium silty sand (3010), dry and friable with occasional flecks of evenly distributed charcoal and occasional small angular to rounded stones. This was overlain by a very light greyish yellow silty clay (3011), moist and firm with occasional small charcoal flecks, evenly distributed. The upper part of the ditch was filled with a light yellowish brown clayey silt (3003), dry and friable with moderate flecks to large angular to rounded stone, evenly distributed, and interspersed by a deposit that probably represents a period of silting (3014). On the last afternoon of excavation a possible post-hole, measuring 0.22 m in diameter, was identified within the base of [3002] but it was preserved in situ and not excavated.

5.5.5 A corresponding ditch terminus was identified on the opposing side of the trench, consistent with the geophysical survey results and the character of a probable causewayed enclosure. The maximum excavated dimensions of the southern ditch terminus [3008] were 1.86 m wide (NE-SW) and 0.56 m long (NW-SE), the feature was only excavated to a maximum depth of 0.5 m although the true depth is expected to be significantly greater. It was filled with a dark orangey brown silty clay (3009), moist and firm with moderate small to large angular to rounded stone, evenly distributed. The feature edges were difficult to define, and the full extent constrained by the limit of excavation, with insufficient space required to excavate the base.

5.5.6 Three posthole features [3004, 3006 and 3012] were also identified in Trench 3, cut through a layer of material (3015) covering much of the trench, and interpreted as a contemporary working surface (Figure 10). Varying between 0.17m wide and 0.25m deep, there was no apparent pattern to their distribution, and none of the features produced artefacts from within their fills.

6 ARTEFACTS AND ECOFACTS

6.1 Summary

6.1.1 The excavations at Donore yielded a moderate assemblage of material from all three trenches, including human remains (reported on below in Section 6.2 and in Appendix B). The site produced 32 sherds of pottery, pending analysis by Helen Roche. Initial comments suggest the Trench 1 pottery is Bronze Age and post-dates the urn recorded from the cist. The site produced 149 lithics, at least 31 worked and a bag of

unworked chert. Initial inspection of the lithics identified the majority of pieces from Trench 1 had been burned, showing pot-lid fractures consistent with cremation. The quality of the working on the stone artifacts is generally low - lithics at Trench 1 and 2 include a number of burned pieces, Trench 3 less commonly burnt and with better quality working (Steve Davis, pers. comm., pending specialist analysis by Conor Brady). The quantities of additional finds are as follows: metal (66), quartz (50), stone (7), animal bone (98), chert (27), glass (3), shell (1), slag (3) and slate (3) (see Appendix C for complete artefact list). Alongside the artefact assemblage 16 environmental samples were taken totalling 194 litres of soil (Appendix D). Specialist analysis of the artefacts is ongoing, and will be reported on in full in the final report expected within the first quarter of 2024.

7 HUMAN REMAINS

Mairead Ni Challanain

7.1 Introduction

7.1.1 The bone was in a moderate state of preservation but was very fragmented. The surface of most of the long bone fragments was quite degraded and, in some cases, flaky, which might indicate the bone was buried in quite acidic soils. Approximately 30 fragments of bone were identifiable in the assemblage. 0.8g of cremated bone was included in the assemblage for analysis, from the same context (c.1008) but it was not possible to determine if the bone was animal or human. Some fragments of animal bone were also identified amongst the remains and these have been re-bagged separately.

7.2 Minimum Number of Individuals (MNI)

7.2.1 The disarticulated assemblage consisted of over 100 human bone fragments and six teeth, and two of these fragments were used to assess the minimum number of individuals (MNI). These fragments represented at least one adult individual. It was not possible to age the adult remains more accurately than this and in terms of biological sex, this was undetermined. Based on the degree of wear on the dentition, it could be tentatively suggested that the individual was over 40 years of age, but given this assessment is based on an isolated element of the skeleton it might not be accurate. Some of the bones did have evidence of pathological conditions and these were duly recorded.

7.3 Pathological assessment

7.3.1 The surface of the bone was in poor condition due to taphonomic factors which made identifying pathological change on the bone difficult. Having said that the vertebrae and ribs identified had evidence of degenerative change (see Plates 11 and 12). The dens had moderate osteophytes present on the superior surface and this was also evident on the superior process of C7. The thoracic body fragment had moderate to severe osteophytes on the superior margins which gave the body a 'squeezed' appearance . Two of the rib fragments had evidence of degenerative change with moderate to severe osteophytes recorded on the inferior articular facets. Four of the

six teeth (66%) had severe wear and in the case of the upper molars the occlusal surface was all but eroded (see Plate 13). The buccal and lingual surfaces of the remaining teeth had small flecks of dental calculus (mineralised plaque) which can be caused by a diet high in protein and particularly if dental hygiene is poor (Roberts and Manchester 2005, Hillson 1996).

7.4 Summary

7.4.1 The disarticulated remains from Oldbridge would suggest the remains had been disturbed multiple times based on the degree of fragmentation and the number of identifiable elements recovered. The remains were in a moderate state of preservation in spite of the fragmentation and represented at least one adult individual who suffered from degenerative changes to the spine and had poor dental health. The recovery of a petrous bone means that aDNA extraction can be attempted - this will be undertaken in 2024 by Dr Lara Cassidy at TCD (subject to permissions).

8 PUBLIC IMPACT

8.1 Introduction

8.1.1 This section details the social impact of fieldwork for project participants. DigVentures defines social impact as a measure of the positive and negative primary and secondary long-term effects produced by the programme, whether directly or indirectly, intended, or unintended, over and above what would have happened in the absence of the project initiative. Results were analysed using a bespoke social impact methodology, drawing on DigVentures' Theory of Change and Standards of Evidence framework (Wilkins 2019, 77; Wilkins 2019, 30).

8.2 Public programming

8.2.1 Due to the sensitive nature of the archaeology, public engagement was targeted only to participants of the excavation and subscribers to the DigVentures website. A program of enrichment events including lectures and workshops was provided for the excavation participants who comprised members of the public, members of amateur archaeology groups, and students.

8.2.2 A carefully designed programme of public participation was planned for the course of the two weeklong project (04th until 16th July 2023). Participation and training of venturers in the trench were serviced to National Occupational Standards:

- Excavation training (04th until 16th July 2023) – 17 participants
- Two archaeological illustration training workshops for existing participants (7th and 14th July – 17 participants
- Finds processing workshop (15 July) – 9 participants
- Tour of Oldbridge House (14 July) – 9 participants
- Digital engagement strategy for subscribers - 320 unique visitors

8.2.3 DigVentures' own digital engagement strategy for the excavation was designed to keep the digital subscribers up to date through a 'live blog' on the Dig Timeline: https://digventures.com/projects/boyne-valley/timeline/ (320 unique visitors for the duration of the excavation).

8.2.4 Whilst these results demonstrate a public appetite for the project, any evaluation of social impact needs to go beyond a list of output numbers of participants (Gould 2016). DigVentures has developed a bespoke evaluation methodology for measuring the social impact of public archaeology programmes and this is discussed in specific relation to this project further below.

8.3 Evaluation methodology

8.3.1 For the purposes of evaluation, participants were separated into two categories: in-person project participants, and informal online visitors. DigVentures have developed a methodology for measuring the social impact of archaeology programmes for participants, pictured as a Theory of Change detailing outputs, outcomes and impacts. In this framework, social impact can be conceived as the difference that activities make to people's lives over and above what would have happened in the absence of that initiative. Outputs are a measurable unit of product or service, such as a community excavation; outcomes are an observable change for individuals or communities, such as acquiring skills or knowledge. Impact is therefore the effect on outcomes attributable to the output, measured against two metrics: scale, or breadth of people reached; and depth, or the importance of this impact on their lives.

8.3.2 The credibility of a Theory of Change rests on the level of certainty that organisational activities are the cause of this change. For this certainty to be achieved, the correct data must be collected to isolate the impact to the intervention. The DV Theory of Change is therefore linked to a Standards of Evidence framework designed to articulate and highlight the causal links between activity and change.

8.3.3 In support of this overarching methodology, a data collection strategy was undertaken for in-person participants. They were interviewed before their respective experience by completing a questionnaire upon booking and were also interviewed post experience (100% completion rate, or 17 in total). For analysis, the age and professional background of participants were classified using categories obtained from the Office for National Statistics. The students (7 total) and members of amateur archaeology groups (4 total) were not interviewed about their experience because they joined the project through University College Dublin rather than through DigVentures and are therefore not represented in these results for participants.

8.3.4 At this stage of preliminary reporting, this section will focus on output numbers and socio-economic distribution of participants only. The final evaluation report will include a more in-depth analysis designed to reveal 'whether or not people will have learnt about heritage, developed skills, changed their attitudes and/or behaviour, and had an enjoyable experience'.

8.4 Social impact

8.4.1 Participants who joined the project, could take part for a minimum of 6 days to ensure they received proper guidance and training. All training followed DigVentures' CIfA-endorsed Field School curriculum and is designed in line with National Occupational Standards (NOS). Participants are encouraged to record their progress in learning new skills. This means participants were able to use tools such as the CPD Skill Passport to track their progress.

8.4.2 The age of participants ranged from adults aged 18-24 to those aged 65-75. Figure 14 illustrates that all age groups in between are represented, with the largest group being 55-64 (35%, or 6 in total), Participants further represented a variety of part or full-time occupations (60%, or 10 in total) and retirees (18%, or 3 in total). Another 22% of participants, or 4 in total were university students. (see Figure 14). Examples of professions included for example waiter, medical practitioner, business consultant, nurse, COO and data protection officer. Taking this into consideration, almost all age groups and different socio-economic backgrounds were represented in the data. This illustrates that the project allowed participation for people with different occupations, as well as younger people, which is a marked improvement on existing community archaeology provision compared with the typically retired, over 65 local civic society groups (Wilkins 2020, 33).

8.4.3 Participants joined the project from all over Britain and Ireland. Only or 1 (6%) in total lived within 50 miles and 1 (6%) within 100 miles of Donore. The majority of people who joined the dig travelled between at 100 and 300 miles (59%, or 10 in total) to have the opportunity to take part in the project. 29% of participants, or 5 in total joined from even further away and live over 300 miles away from the excavation location. Of these, 2 individuals travelled from outside the British Isles and joined the excavation from Switzerland and the United States of America (see Figure 15).

8.4.4 In addition to widening the demographic and socioeconomic range of participation (when compared to existing community archaeology provision), the project attracted a new audience for archaeology, with 29% of participants, or 5 in total having never taken part in archaeology activities before (see Figure 14).

8.4.5 After their experience, participants were asked about what they liked and didn't like about their time on site. This is a selection of their highlights:

- "It's got to be finding the little flint scraper and seeing it through to the bottom of the causewayed enclosure. It's a privilege!" – (Peter, medical practitioner, 45-54 years old)
- "It's been a great learning experience that has really built my confidence!" (Claire, admin, 25-34)
- "The thing I've enjoyed most is your patience and the time you've taken to explain everything. And the passion that everyone else has had too." (Lisa, business consultant, 45-54)
- "My highlight was seeing the story of the site develop, And the finding of the plaque." (Kate, nurse, 55-64)

8.4.6 A virtual component was added to the project to promote the excavation to a select DigVentures audience. The Dig Timeline was available for all on-site participants and DigVentures subscribers to receive daily updates. The Dig Timeline was viewed by 320 unique viewers and the average number of visits per user was 2.3.

8.5 Conclusion

8.5.1 As a small-scale initiative designed as a pilot for the DigVentures community excavation model in the ROI, public engagement was integral to the research aims and success of the excavation. Success is measured through the positive effect of involvement on participants and the wider community. By providing this opportunity to participate in archaeology to members of the public outside of the usual routes, the project succeeded in attracting a new audience for archaeology, with 29% of the participants having never taken part in archaeology activities before. The project also attracted people from several countries and as far afield as the United States of America. The fact that the Dig Timeline attracted 320 repeat viewers despite the very limited release of information to a select group of participants, suggests there is a great demand for this kind of virtual engagement.

8.5.2 The project offered a unique opportunity for a new audience to not only engage with heritage but to participate in training activities independently accredited through CIfA. The insights gained from this evaluation have established a clear community need and demand for more archaeological work in the region and further evaluation will analyse the deeper motivations and impact of the public engagement programme.

9 DISCUSSION AND CONCLUSIONS

9.1 Introduction

9.1.1 The overarching aim of the project was to build on the results of earlier geophysical survey work by defining and characterising anomalies through a programme of survey and excavation, obtaining data to improve understanding of the site. There were a combination of both research and archaeological management questions underpinning the fieldwork.

9.1.2 Research focussed on investigating evidence for early Neolithic-Bronze Age activity at Donore Hill in the context of the wider landscape archaeology of Brú na Bóinne. The goal was to address current gaps in knowledge outside the core of the Brú na Bóinne WHS in an area that has seen limited or no archaeological investigation. Management aims focussed on understanding the impact of the current land management regime on buried archaeological deposits. The landowner is beginning the process to rewild the fields that comprise the study area, and the goal was to provide baseline information which can contribute to the future management of the landscape.

9.1.3 Artefacts and ecological samples are in storage and under analysis at UCD School of Archaeology, Dublin, with licences for C14 dating samples have been submitted and are awaiting issue before progressing. The final report is anticipated to be completed, pending specialist contributions within the first quarter of 2024. What follows below is an interim, preliminary assessment of the capacity of the fieldwork results to address

the questions outlined in the Project Design (Wilkins et al 2023). This will be substantially expanded upon in the final report, alongside an updated project design outlining the potential for future research and fieldwork.

9.2 Project Aim 1

9.2.1 Aim 1 sought to 'identify the physical extent and character of the archaeological remains at Donore Hill with a programme of remote sensing, topographic survey and photogrammetry.' Earlier work undertaken by Dr Steve Davies exploring the lidar data, satellite data and palaeoenvironments of Brú na Bóinne, alongside largescale geophysical research by the Romano-Germanic Commission (RGK), Frankfurt and UCD School of Archaeology, had demonstrated the significant research potential for the wider WHS environs. However, wider conclusions were difficult to draw due to the lack of field checking to validate and ground truth identified anomalies. Fieldwork has demonstrated beyond doubt that the combination of largescale non-invasive analytical techniques combined with targeted keyhole interventions to address specific questions is a successful, replicable approach in the context of protected and archaeologically sensitive landscapes.

9.2.2 The most tangible success in this regard is the rediscovery of the Oldbridge Barrow, and the redundant RMP monument (ME020-078----) misidentified and wrongly recorded that can now be correctly located and updated. The original survey identified a series of anomalies adjacent to a large, greywacke standing stone, with a jumble of angular broken rock at its base. Now known locally as 'Dead Man's Field', although the name 'Loc a'Wanny' is also still recorded, the geophysical survey identified some exciting anomalies, including a narrow ditch, concentric with the stone, a small post-built barrow and an unusual two-row pit or post alignment. The discovery of a small, partially demolished, early modern building with a standing stone apparently stood within it, was unusual to say the least. The missing piece of the puzzle, a brass plaque 'site report' from the original 19th century excavator, has helped to bring a lost piece of archaeological history back into the light (a wonderful discovery indulged in further below).

9.2.3 On a cool and damp December morning in 1889 Patrick Coogan set off to plough the field known locally as the 'Molly Moor', ‘Loc a’Wanny’ or simply as 'The Mountain' on the south side of the River Boyne. Not for the first time his plough struck the large stone at the highest point of the field, overlooking the big enclosure at Dowth to the north. Cursing under his breath, he decided that this would be the last time, and that the big stone has got to go.

9.2.4 When Coogan lifted the offending stone he was surprised to find someone looking back at him from a cavity beneath: the upper part of a toothless skull. The large greywacke slab he had moved was in fact the capstone of an early Bronze Age cist burial. Unlike the similar but more elaborate double cist found in the grounds of Oldbridge House in 1894, there were no grave goods recorded except a funerary urn – a food vessel – partially broken and with some burning present. And a selection of human bones – a skull and at least some longbones. Patrick sent a message to the big house at Oldbridge, and to his landlord Lt Col Coddington, telling him what he had found. Soon after the skull, bones and urn were transported to Oldbridge House and

Coddington, who was, to his credit, interested in such things and quite forward thinking, ordered a wooden shed to be built over the find to protect it, and commissioned a copper plaque to be struck for the door.

9.2.5 For a while the site attained a level of local fame (Haddon, 1901). The skull was sent to Dr William Frazer, a senior fellow of the Royal College of Surgeons of Ireland and also a fellow of the Royal Society of Antiquaries of Ireland. He in turn lent the skull to the well-known anthropologist Alfred Cort Haddon, at the time Professor of Science at the College of Science, Dublin (later the faculty of Science and Engineering at UCD). Haddon visited the site in its hut with Prof. George Coffey, the first keeper of antiquities at the National Museum of Ireland, and expert on the archaeology of Brú na Boinne, and he (Haddon) published a short paper on the discovery in the Proceedings of the Royal Irish Academy 1896-8, focusing (predictably) on measurements from the skull.

9.2.6 In the 1930s a Mrs Brien recounted the story in part to Patrick McGuinness, who in turn passed it on to his daughter Peggie and in turn again to the collectors of the Irish Folklore Commission who were at the time engaged in what became known as the Schools' Folklore Scheme and resulted in the Schools Manuscript Collection (Duchas.ie (2), School's Collection). She recalled the greywacke (Tullyesker) slab, the finds, and the small building known by now as the 'Dead Man's House'. After this the site became lost – a cist burial on a hill near Oldbridge with a little house and a greywacke capstone.

9.3 Project Aim 2

9.3.1 The second aim of the project was to characterise the development history, chronology and phasing of the targeted areas through archaeological excavation, and in particular, establish the presence of Neolithic/EBA or earlier features. The unusual discoveries associated with Trench 1 have been discussed above. Trench 2, situated adjacent in Oldbridge townland, was a significant discovery in its own right: the confirmation of a monumental post alignment also demonstrating the validity of the project's remote sensing methodology.

9.3.2 Monumental post alignments are a relatively rare and imperfectly understood occurrence within the Irish, Scottish and Northern English archaeological landscape. Their common features are parallel rows of evenly-spaced pits, and most are found in association with monumental ritual structures or forming part of a wider ritual landscape (Davis and Rassmann, 2021). There is potential significance in the orientation of the pit rows, relative to celestial events and seasonal solar/lunar markers, but a lack of precise conformity prevents definitive categorisation by these characteristics alone. Pit alignments differ from post-defined cursuses (which are typically isolated to Scotland) in scale, character and orientation, but both types of monument often occur on flattish ground, above the local flood plain and form large, linear (longer than they are wide) landscape features. The typical location of pit alignments again lacks a consistent uniformity, further hindering classification by geographical position.

9.3.3 Many of the known examples in Ireland have been subjected to some degree of intrusive archaeological investigation but not all of these produced datable evidence.

Pit alignments which have produced dates belong to the Late Neolithic period (c. 2850–2450 BC). In an Irish context, there are known examples of pit alignments at Ballynahatty, Co. Down (Hartwell, 2023), two at Newgrange, Co. Meath (Davis and Rassmann 2021), a possible example at Dowth, Co. Meath (Davis and Rassmann 2021), an enclosure with possible alignment at Lugg, Co. Dublin (Roche, Eogan 2007) and an undated 'ritual avenue' at Ballingowan, Co. Kerry (Long, 2020). Within the Bru Na Boinne landscape the closest comparator is the Great Rectangular Palisade, identified by geophysical survey to the south west of Newgrange in 2015 by Joanna Leigh, working on behalf of the OPW (Leigh, 2018). The survey results identified a c. 70m long rectangular structure – now seen to be significantly longer – comprising pits and slot trenches, aligned east–west. Geraldine Stout undertook a trial excavation at the site, exploring a sample of pits in the interior of the monument, with carbonised remains in a basal ditch-fill returned dates of 2632–2472 cal. BC (Leigh, 2018).

9.3.4 Trench 3, situated on the upper slopes of Donore Hill, within Staleen townland investigated geophysical anomalies consisted with the pattern of a Causedwayed enclosure – a circuit of interrupted ditches in a sub-circular or oval shape and can be formed of up to three concentric circles of ditches (Oswald 2001). The construction of causewayed enclosures has been dated to a period of 150-200 years from the late 38th to the mid-36th century BC (Whittle et al 2011). It is thought these monuments originated in Europe and spread quickly through western Europe and the British Isles. It is not yet known whether concentric ditched were contemporaneous, or represent successive phases of activity over a longer duration.

9.3.5 The function of causewayed enclosures is still not certain, and the interpretation of these monuments has not changed greatly since the 1950s and that put forward by Stuart Piggott in the 1950s, that they are a 'seasonal meeting place for a scattered population' (1954). Further interpretations of the function of these monuments are that they are centres of trade, defence, burial, feasting and ritual activity.

9.3.6 The discovery of a previously unknown enclosure in the Boyne Valley increases the confirmed number of enclosures in Ireland to three, the other two being Donegore Hill, Co. Antrim and at Magheraboy, Co. Sligo. A fourth causewayed enclosure was thought to be at Lyles Hill and indeed was listed in the Creation of Monuments (Oswald et al. 2001), but in the following years it has been determined it was constructed later in the 3rd and 2nd millenniums BC (Cooney et al 2011, p562). The excavations at Magheraboy and Donegore produced widely different quantities of material, with c.45000 Neolithic sherds being recovered from Donegore compared to 1229 sherds from Magheraboy. This contrast in material was also seen in the lithic assemblage (Cooney et al 2011). Very little in the way of material culture was recovered from the terminus fills, and nothing from the basal deposits - this very similar to Hughestown, excavated in the Dublin Mountains (O'Brien and O'Driscoll, 2017), dating to c. 3600 BC.

9.3.7 Typically, causewayed enclosures, and specifically the termini, tend to be the focus of deposition. The lack of material within the ditch terminus may relate to the longevity of use of the monument. The enclosure ditches could be seen as representing the way Neolithic communities were composed of smaller social groups or perhaps even specific relationships. At Haddenham enclosure in Cambridgeshire it has been

suggested that segments that are adjacent are constructed by those that are more closely related than those further away (Evans and Hodder 2006). It may be that the ditch excavated was dug by one social group but then something happened, and they were no longer able to return, or they formed a union with another group and so their focus shifted away from this ditch segment towards another. It is not possible to draw conclusions from a single terminus, and further excavation is required to see if this is common throughout the monument.

9.4 Project Aim 3, 4 and 5

9.4.1 In depth discussion of Aim 3 and 4 (specialist assessment and analysis) is beyond the scope of this interim report, and will be detailed in the final report expected in the early 2024. This report will contain recommendations for further work as required (including field and lab analysis), and details on planned publication.

9.4.2 Aim 5 focussed on public engagement, delivered through a structured field school for community and student participants who were trained and mentored in the techniques of archaeological excavation. As a small-scale initiative designed as a pilot for the DigVentures community excavation model in Ireland, public engagement was integral to the research aims and success of the excavation. The project delivered an in-person programme at a ratio of 1:4 throughout the dig, with online social media updates to engage and inform the public about the archaeological discoveries.

9.4.3 Success was evaluated through a combination of quantitative and qualitative data, indicating the positive affect of involvement on participants and the wider community. The project succeeded in attracting a new audience for archaeology, with 29% of the participants having never taken part in archaeology activities before, including an international audience. The Boyne Valley Research Project has offered a unique opportunity for a new audience to both engage with the broader complexities of conservation within a WHS and to participate in accredited training activities. The insights gained from this evaluation have established a clear community need and demand for more participatory archaeological work at Donore and further evaluation will analyse the deeper motivations and impact of the public engagement programme.

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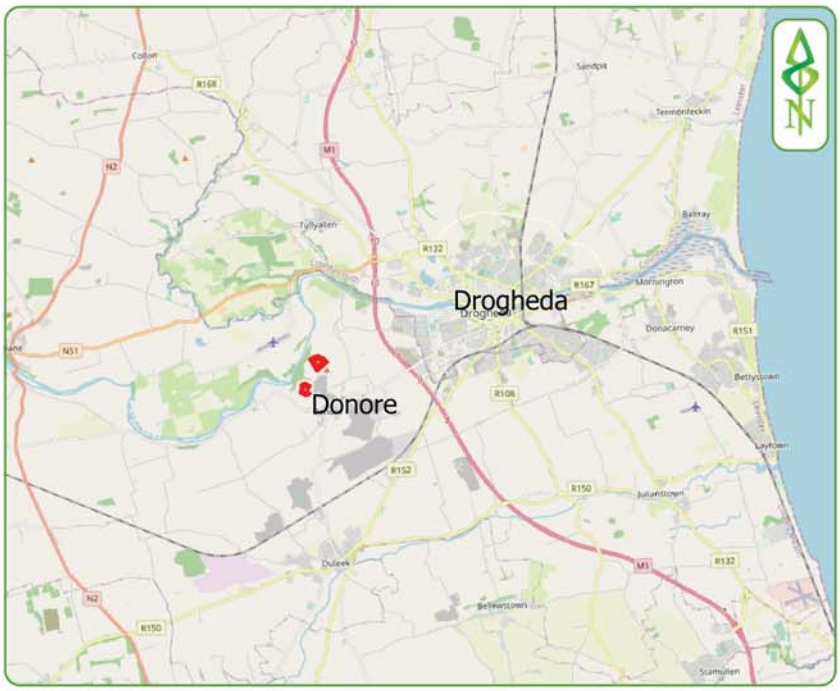
Figures

DigVentures



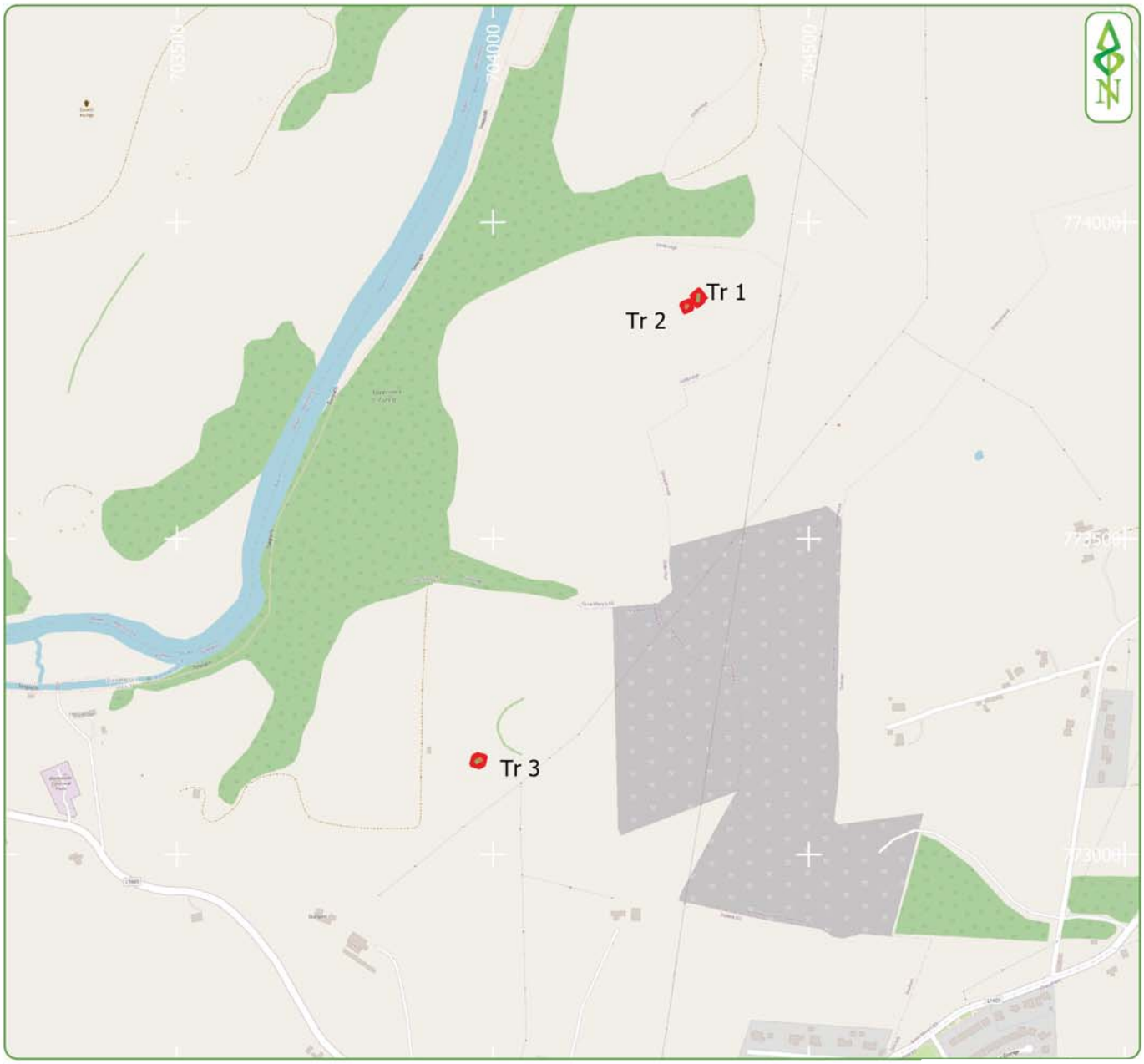


Figure 1 - Site Location.

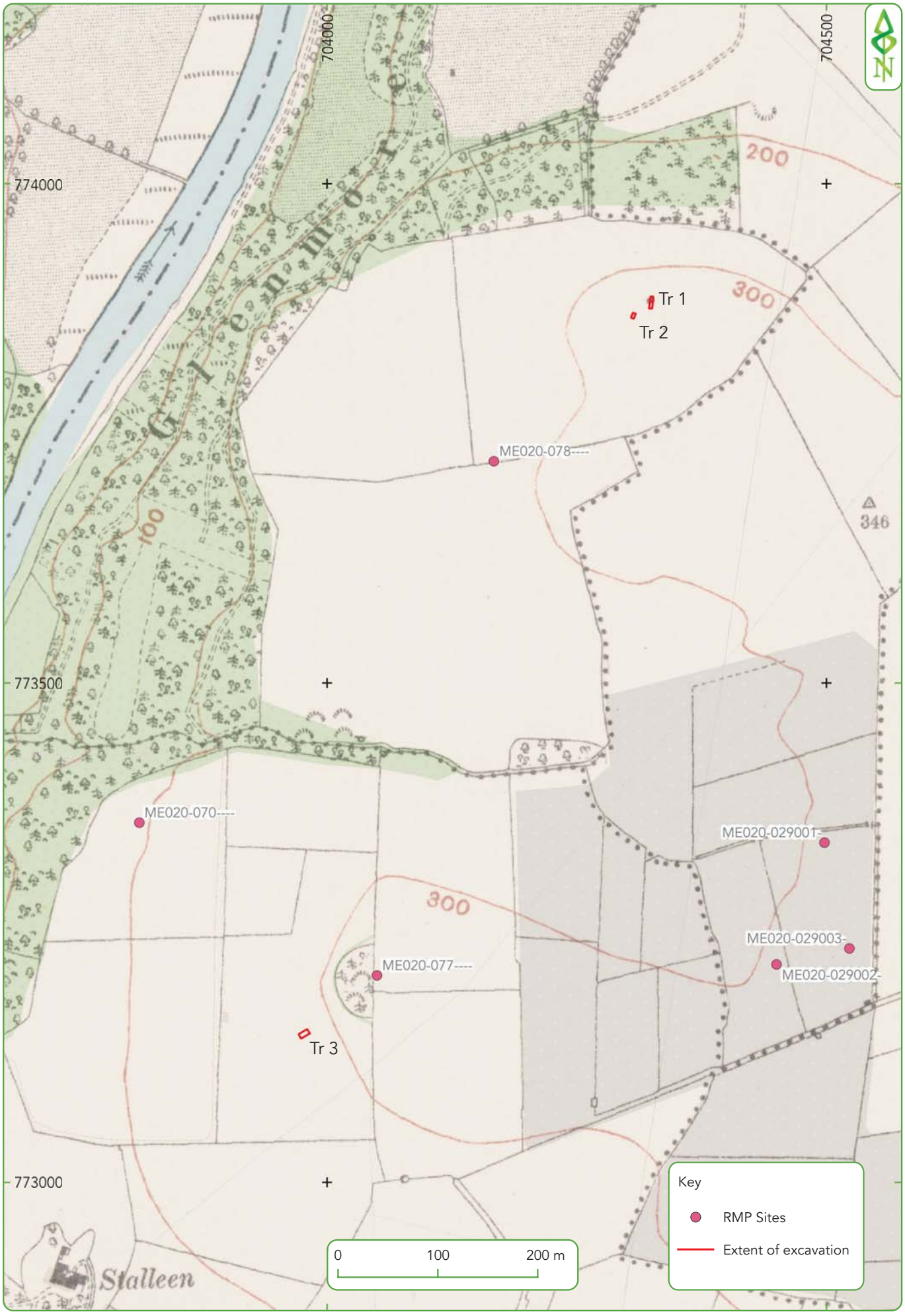


Figure 2 - Site overview, trenches on 1912 OS Meath sheet 20, (surveyed 1836, revised 1909), with RMP sites.

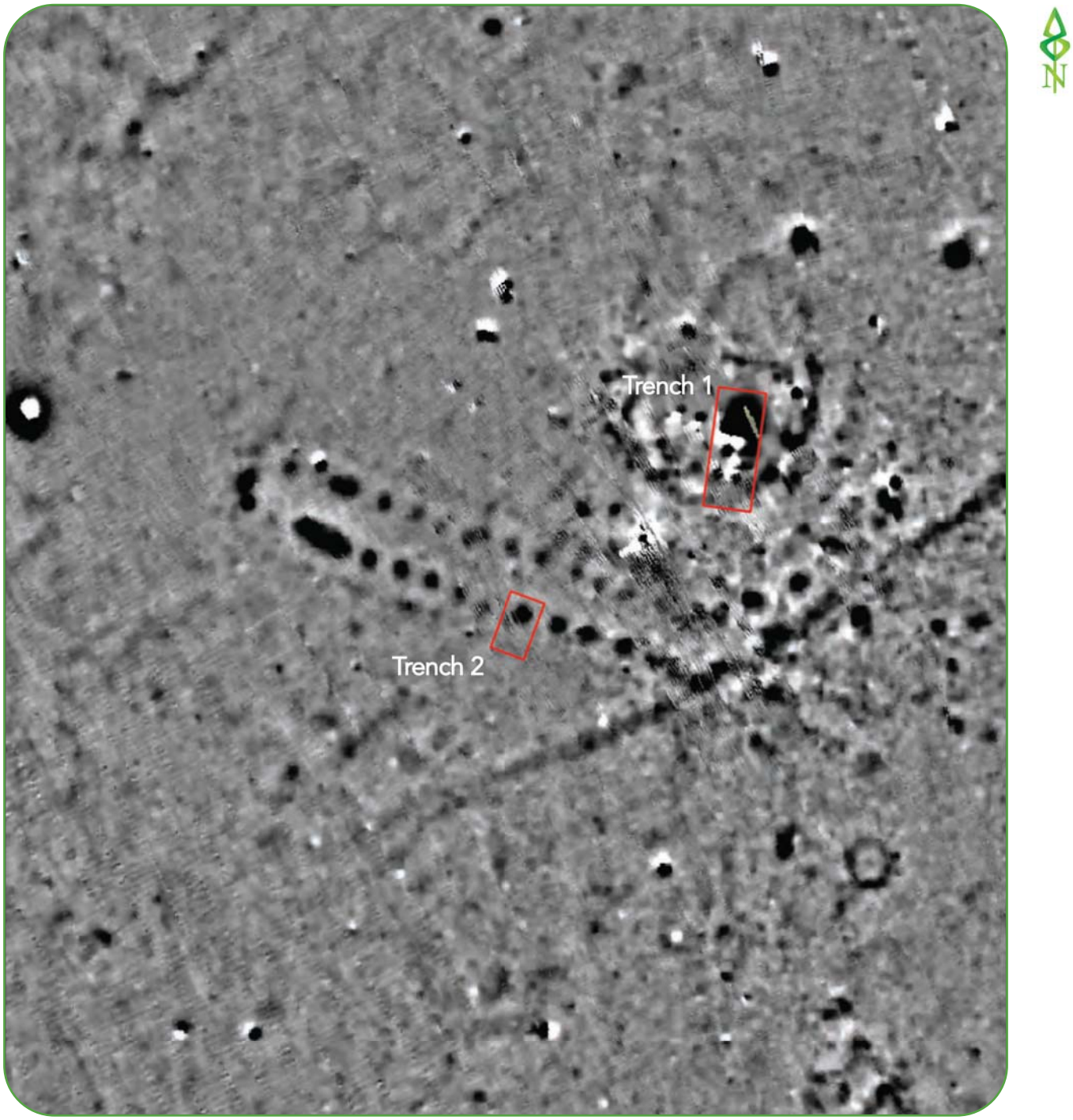


Figure 3 - Trench 1 and 2 location superimposed on Fluxgate Magnetometry survey results.

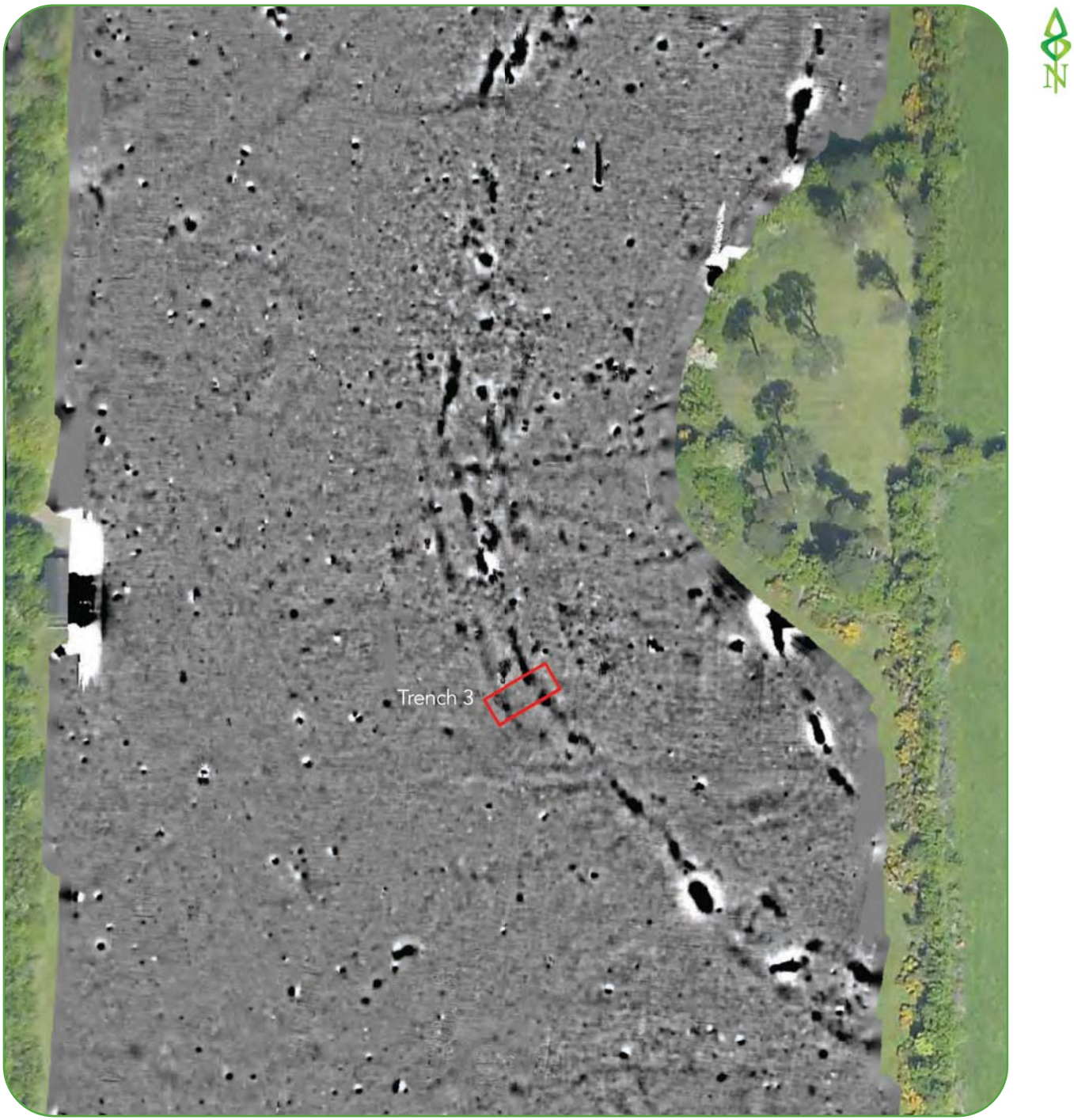


Figure 4 - Trench 3 location superimposed on Fluxgate Magnetometry survey results.

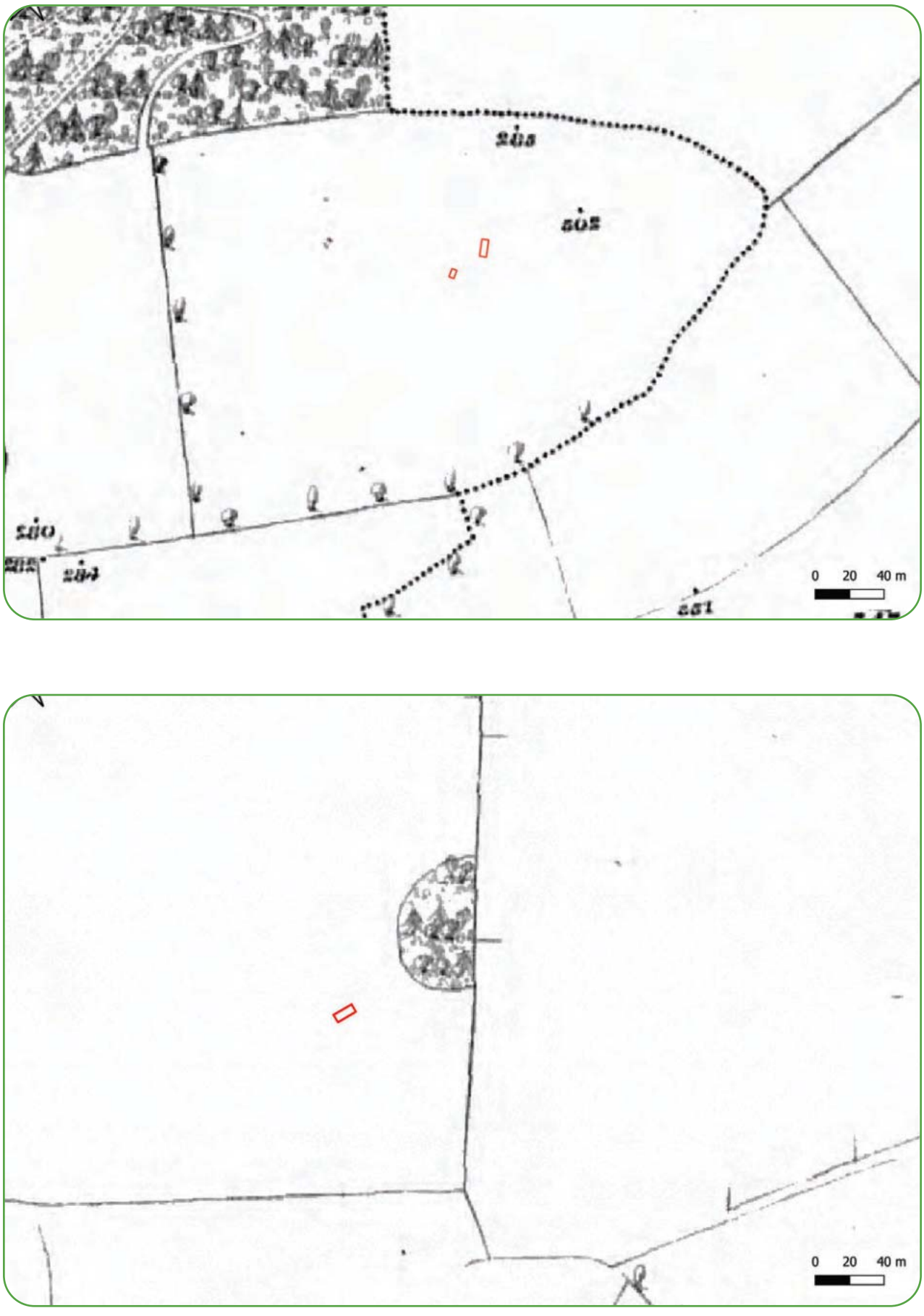


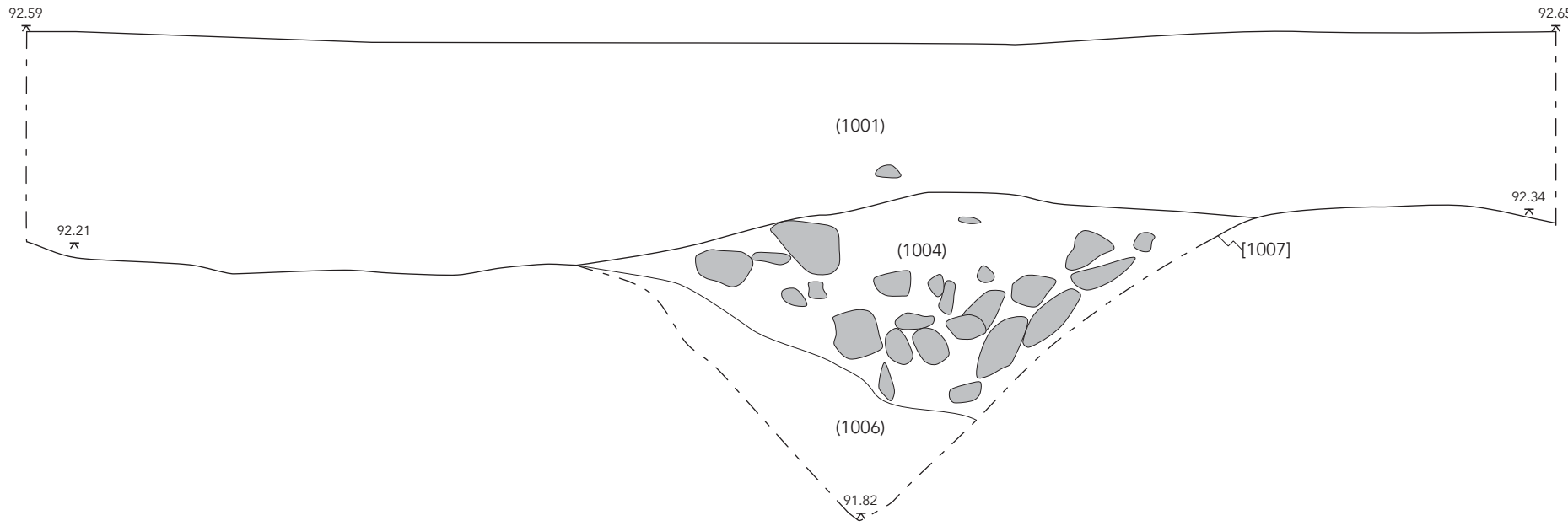
Figure 5 - Location of Trenches 1, 2 (top) and 3 (bottom) on six inch Ordnance Survey 1st Edition mapping extract (1829-1842).

Key
- Limit of Excavation
- Cut
- (1001] Context number
- Interventions
- Stones
- Standing stone
- Layer

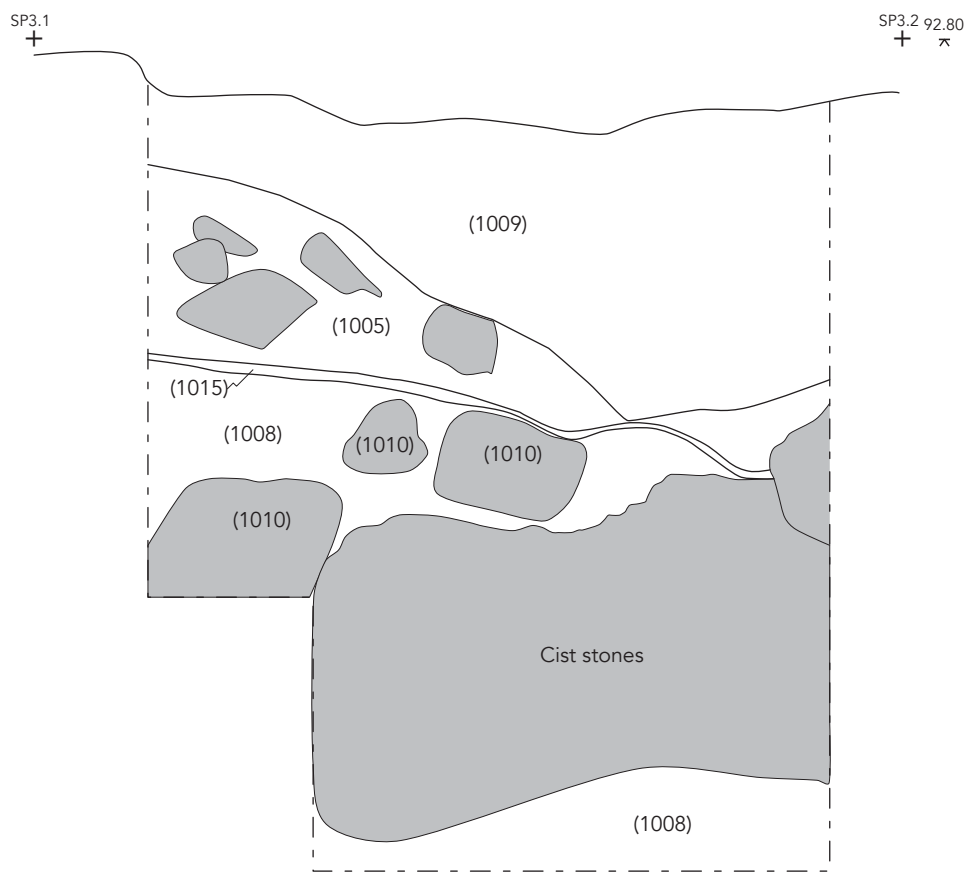
0m 2m 4m
1:40 Scale on A3

Figure 6 - Trench 1 Post excavation plan.

West facing section of ditch [1007]



South east facing section of cist



0m 0.5m 1m
1:10 Scale

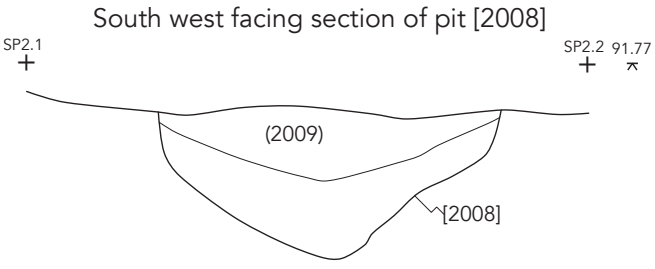
Key
Stones

Figure 7 - Trench 1 sections.

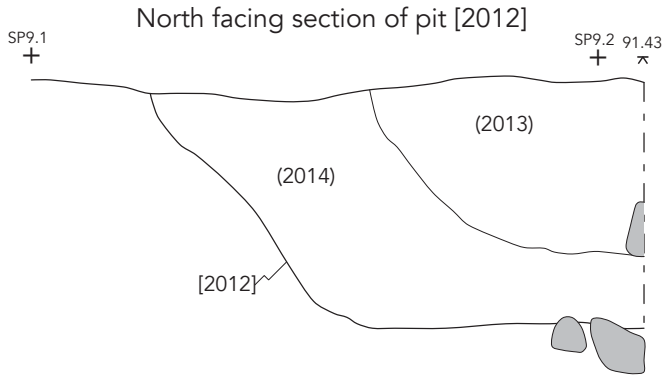
Figure 8 - Trench 2 Post excavation plan.

South East Facing section of pit [2004][2010]

South west facing section of pit [2008]



North facing section of pit [2012]



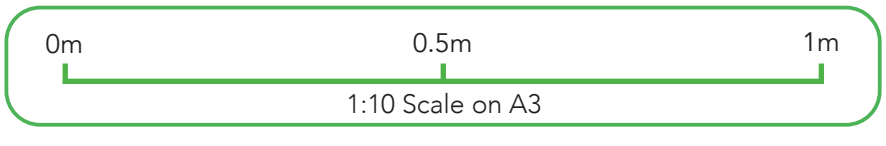
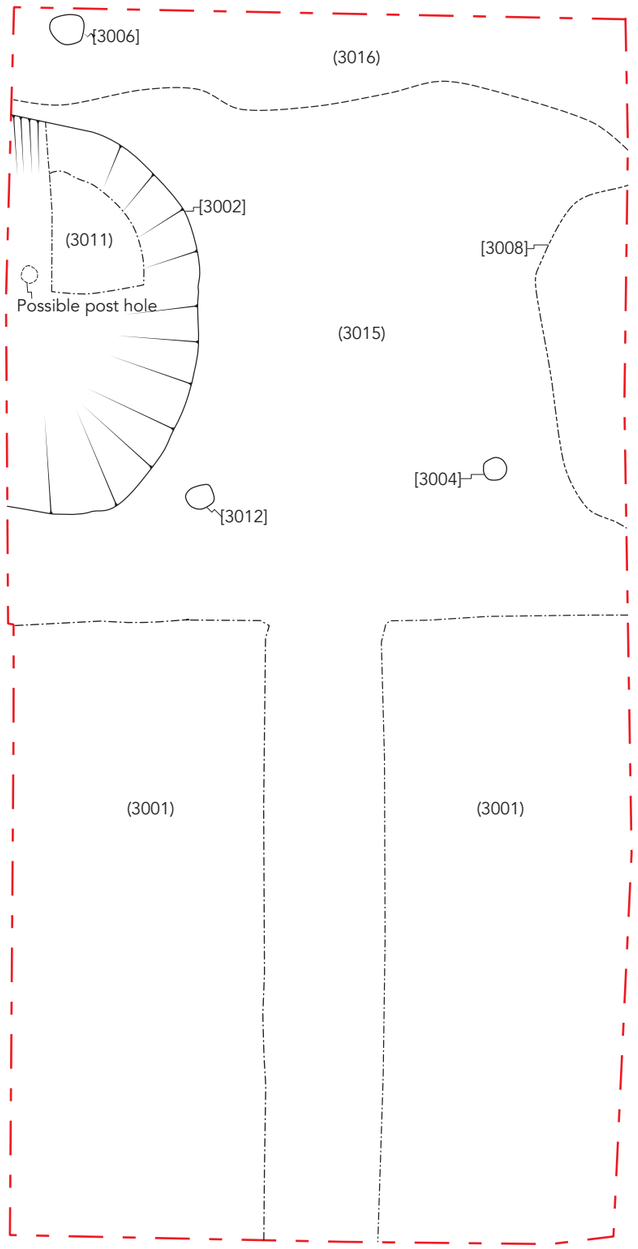


Figure 9 - Trench 2 sections.

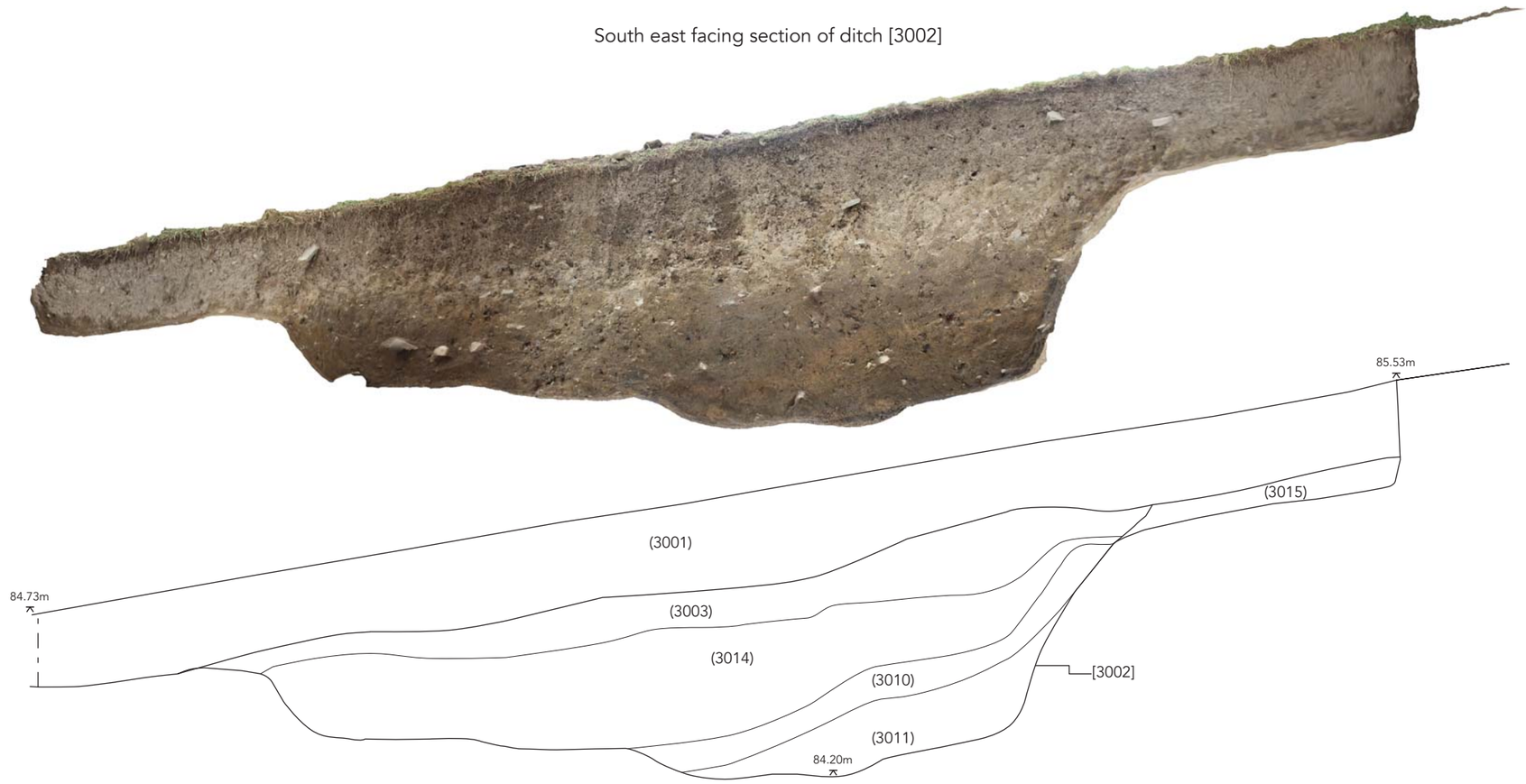


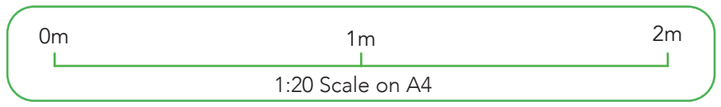
Key
- Limit of Excavation
- Cut
- Uncertain cut
- (1001) Context number
- Interventions
- Stones
- Layer

0m 2.5m 5m
1:50 Scale

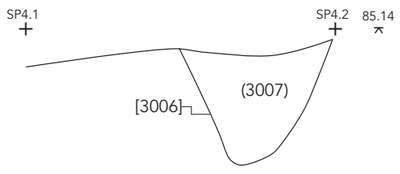
Figure 10 - Trench 3 post excavation plan.

South east facing section of ditch [3002]

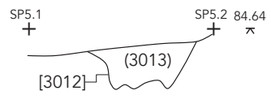




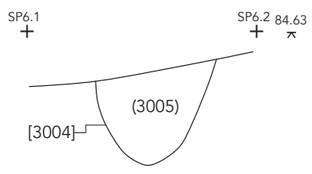
South facing section of post hole [3006]



South facing section of post hole [3012]



South facing section of post hole [3004]



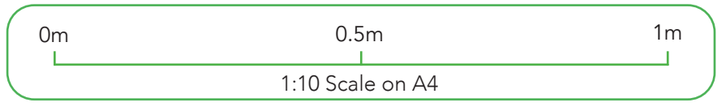


Figure 11 - Trench 3 Sections.

Plate 1 - View of stone platform (1002) after initial cleaning, facing NE, 1m scale

Plate 2 - Plaque in situ within cist in Trench 1

Plate 3 - Plaque excavated from within (1002) with 2cm scale

Plate 4 - Post-excavation view of structure (1002), with cist (1010) and infill layers (1009), looking north,

Plate 5 - Post excavation section and view of ditch in Trench 1 [1007], looking west, 0.5m scale

Figure 12 - Trench 1 Record photos.

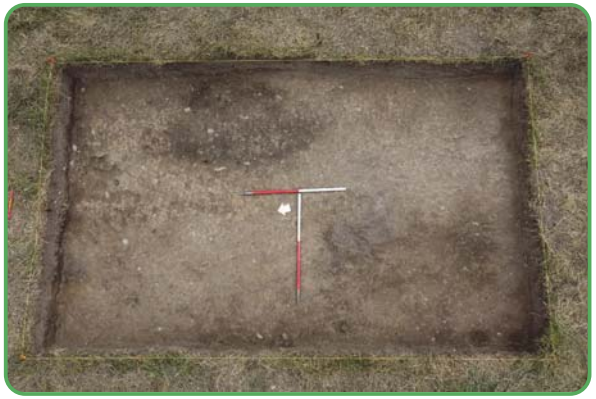


Plate 6 - Pre excavation photo of Trench 2 showing pit complex [2004] and [2010], looking east, 1m x 1m scale

Plate 7 - Mid-excavation view of pit [2004] recut within larger pit [2010], looking east, 0.5m scale

Plate 8 - Plan view of circular pit [2016] with (2017), looking north west, 0.3m scale

Plate 9 – Pre-excavation photo of Trench 3 showing the extent of terminus ditch [3002], looking south, 1x1m scale

Plate 10 – Section through terminus ditch [3002], looking north, 1m scale

Figure 13 - Trenches 2 and 3 Record photos.

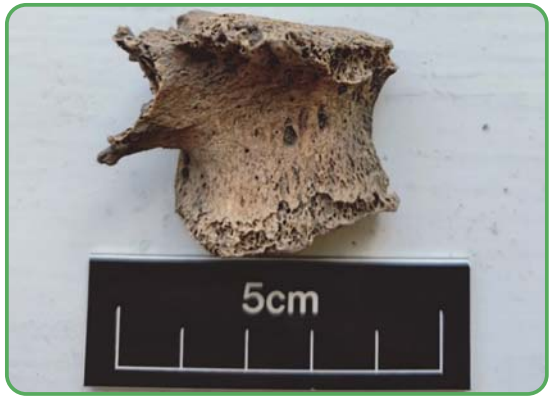


Plate 11 - Osteophtes on the superior margin of thoracic vertebra

Plate 12 - Degenerative change to the ribs

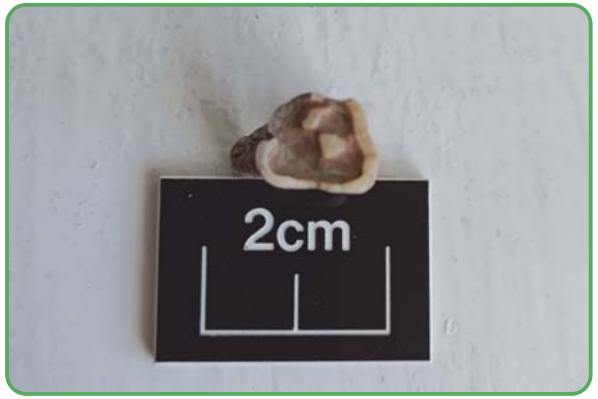


Plate 13 - Wear on maxillary molar

Figure 14. Human remains photographs.

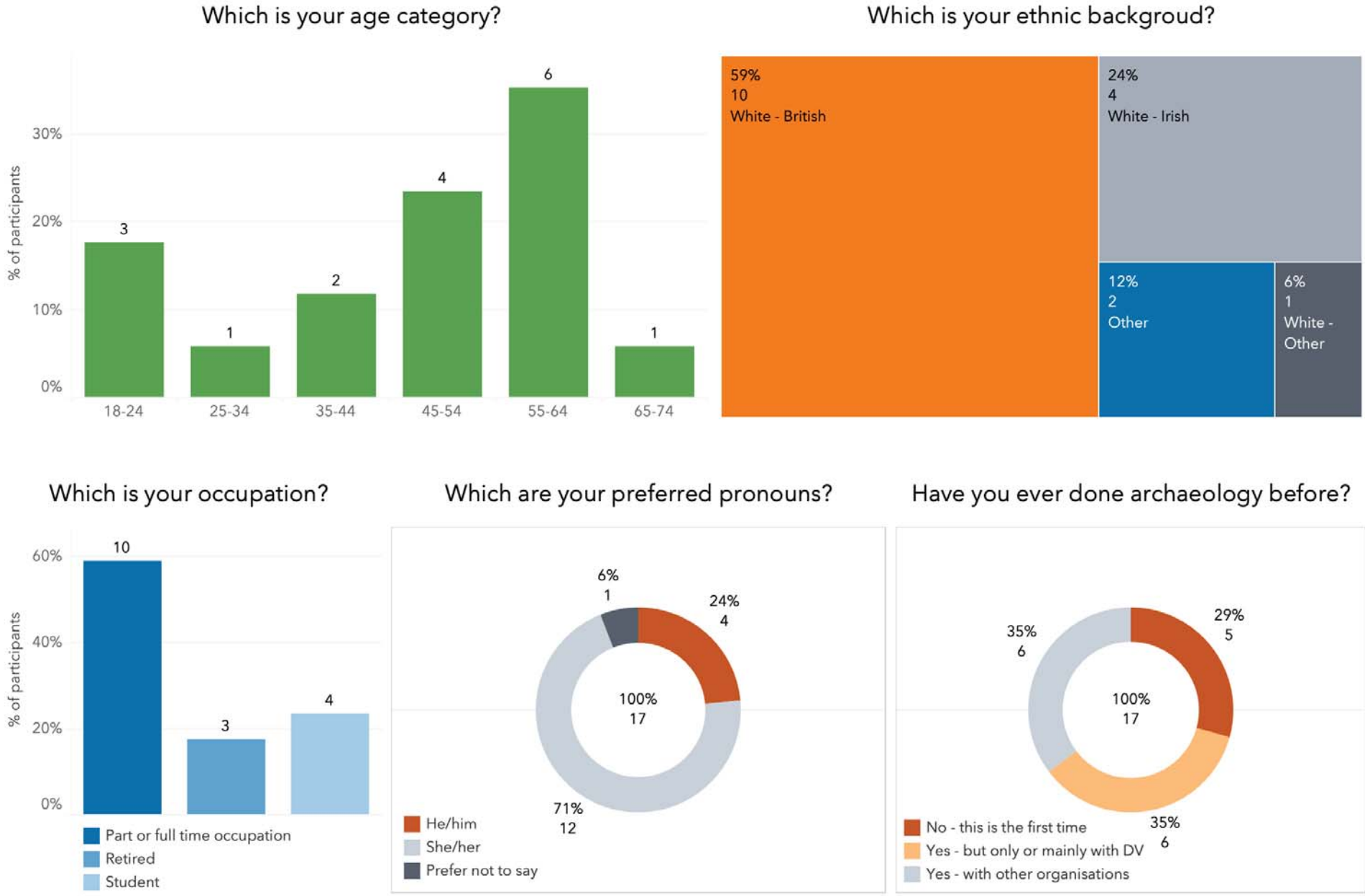


Figure 15 - Venturer demographics.

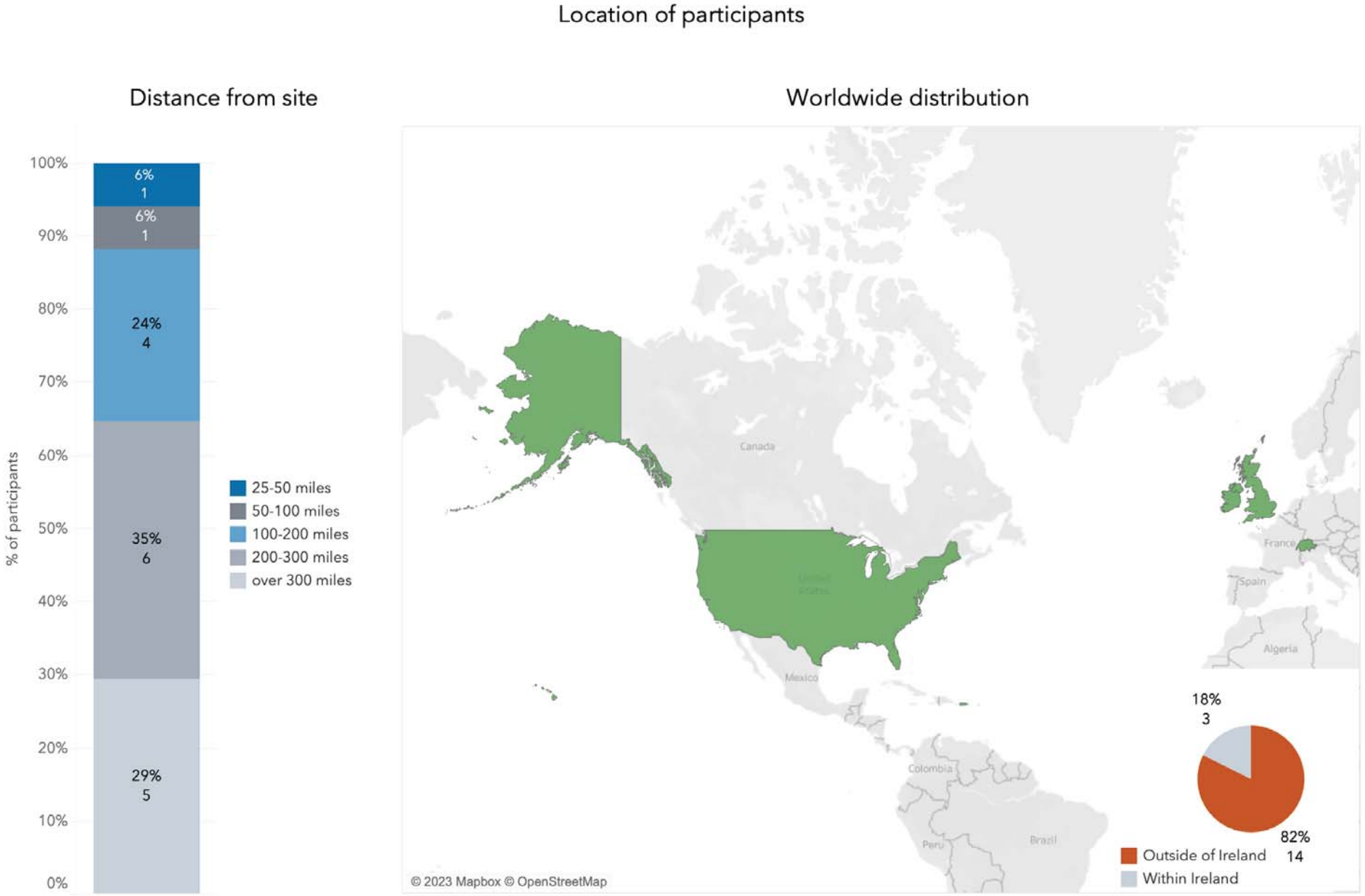


Figure 16 - Venturer locations.

Opening up Trench 3 by hand, teamwork is important from the very beginning of the dig.

Define, define, define! Cleaning back in Trench 1, trying to figure out where the ditch is.

The cist discovered in Trench 1 caused much excitement, even more so when…

… A brass plaque placed there explained that the cist had been excavated in the late 19th century!

Sieving took place of all the material excavated, no stone was left unturned, even our canine friends got involved!

Occasional evening activities were planned, here the team are doing there own interpretations of the landscape after being introduced to archaeological drawing.

Figure 17 - Community photos.

Appendices

Appendix A: Context descriptions

Table 2. Trench 1 context descriptions

Trench 1	Dimensions:	3x15m				
	Orientation:	N-S				
	Reason for trench:	Investigate a possible enclosure ditch and other potential features in the area				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
1001	Topsoil of trench 1. Colour: mid greyish brown. Composition: sandy silt. Compaction: dry, friable. Inclusions: moderate small to large very angular rubble, concentrated towards square feature at centre.	Layer	Topsoil, disturbed by building of cist, stone structure and excavating of cist Metal detecting pin flags turned up nails and bottle caps			
1002	Form: NE-SW regular, semi-rectangular coursed stone structure. Direction of face(s): SW. Materials: grey regular courses, sub rectangular. Bonding: friable light greenish grey medium lime. Inclusions: 1) frequent flecks of sub-rounded spheroidal small stones evenly distributed 2) frequent flecks of sub-rounded spheroidal chalk evenly distributed. Weathered pointing. Finish and coursing: stones featuring random coursed coursing with rough face finish and unstressed corners.	Masonry	Rectangular structure of as yet unknown use, possibly related to the wooden shed built by the landowner in 19th century to protect the cist that had been excavated below, or replacing it?	2.6	> 1.45 to 2.78	0.18 to 0.40

Trench 1	Dimensions:	3x15m				
	Orientation:	N-S				
	Reason for trench:	Investigate a possible enclosure ditch and other potential features in the area				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
1003	Deposit of rectangular structure. Colour: mid grey. Composition: stone and rubble. Compaction: dry. Inclusions: 1) frequent very large sub-angular to sub-rounded stone, evenly distributed 2) frequent large sub-angular lime mortar, evenly distributed 3) moderate very large sub-angular to sub-rounded concrete, evenly distributed 4) frequent small to very large angular platy slate, evenly distributed.	Deposit	Tumble from the stone structure. Large stones, slate tiling, and lime mortar likely from structure. There are also large (20-35cm) broken pieces of concrete some of which have had iron pipes set into it.	> 3.82	0.65 to 1.20	> 0.30
1004	Fill of ditch [1007]. Colour: mid greyish brown. Composition: medium silty sand. Compaction: moist, firm. Inclusions: 1) frequent medium to large sub-angular rocks, evenly distributed 2) moderate flecks to small sub-angular to sub-rounded charcoal.	Fill	Stony upper fill of ditch [1007]	> 3.20	0.85 to 0.90	0.35 to 0.40

Trench 1	Dimensions:	3x15m				
	Orientation:	N-S				
	Reason for trench:	Investigate a possible enclosure ditch and other potential features in the area				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
1005	Fill of rectangular structure {1002}. Colour: mid greyish brown. Composition: mixed rubble fill. Compaction: moist, loose. Inclusions: 1) frequent small to very large angular platy slate, evenly distributed 2) occasional small to very large angular concrete and cement render 3) moderate flecks to medium sub-angular to sub-rounded lime mortar, evenly distributed 4) moderate flecks to small sub-angular to sub-rounded charcoal, evenly distributed.	Fill	Upper fill of rectangular structure, distinguished by concentrated layer of slate (1015) at the bottom, possibly the collapsed roof of the structure. Has been disturbed several times through vandalism/ excavation and the standing up of the stone by Reggie. Layer is mixed with a variety of rubble			0.50 to 0.76
1006	Fill of ditch [1007]. Colour: mid greyish brown. Composition: sandy silt. Compaction: moist, malleable. Inclusions: moderate flecks to small sub-angular to sub-rounded charcoal, evenly distributed.	Fill	Fill of trench [1007] directly below stony fill (1004). Richer in charcoal, with more pottery finds in the eastern slot of trench. not fully excavated. A 1m slot was put in at the west side of trench and an 0.8m slot at the east side (to investigate the connection with the rectangular structure.	> 3.20	0.90 to 0.97	0.40 to 0.50
1007	Cut of ditch. Shape in plan: semi-linear. Break at top: gradual. Sides: steep, straight. Break at base: sharp. Base: tapered.	Cut	Poss secondary cut of Ditch. Rock fill . 75cm deep 96-99 wide 31cm from top of trench edge	> 3.20	0.90 to 0.97	0.40 to 0.50

Trench 1	Dimensions:	3x15m				
	Orientation:	N-S				
	Reason for trench:	Investigate a possible enclosure ditch and other potential features in the area				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
1008	Fill of rectangular structure. Colour: dark.	Fill	Lower fill of rectangular structure. Mixed shale subsoil and other layers. Contains 19th C finds mixed through with the older. human remains fragmented and mixed through layer. Concentrated towards lower part of fill.			
1009	Fill of rectangular structure. Compaction: very dry, very loose.	Fill	Fill of crushed agricultural lime. Put in by Reggie after finding someone had dug into the structure.			
1010	Form: NE-SW semi-rectangular cist. Materials: grey stone/other. Bonding: none.	Masonry	Stone structure of a probable Brone Age burial cist, edge-set unbonded slabs. Original relationships to surrounding contexts disturbed.	> 0.75	> 0.78	> 0.20
1011	Other context of trench 1. Colour: mid brown. Composition: medium silty sand. Compaction: dry, malleable. Inclusions: frequent small sub-angular to sub-rounded stones, evenly distributed.	Deposit	Part of construction/demolition/ spoil layers from the excavation of the cist and the building of the rectangular structure (1002) Context partially excavated in a 80cm wide slot to find northern edge of ditch [1007]			0.40 (avg.)
1012	Deposit of rectangular structure. Colour: light yellowish grey. Composition: mortar. Compaction: moist, friable.	Deposit	Small spread of mortar at the east side of excavated part of cist. Possibly a layer that was made for the display of human remains within the stone structure. Layer may have covered the entire bottom of the cist but only a small area was remaining. some of the human remains seem to have mortar on them, though it is possible it became cemented to them through time after burial rather than by original intent.		0.22	0.05

Trench 1	Dimensions:	3x15m				
	Orientation:	N-S				
	Reason for trench:	Investigate a possible enclosure ditch and other potential features in the area				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
1013	Subsoil of trench 1. Colour: mid yellowish brown. Composition: sandy silt. Compaction: dry, firm.	Layer	Subsoil			0.15 to 0.38
1014	Natural of trench 1. Colour: dark greyish black. Composition: degrading shale. Compaction: dry, loose.	Layer	Natural subsoil/ bedrock.			
1015	Layer of rectangular structure. Colour: mid bluish grey. Composition: slate. Compaction: very dry.	Layer	Likely the slate roof of the Victorian structure surrounding the cist. Slate was found throughout the trench, but this was a concentrated layer within the rectangular stone structure (1002)			

Table 3. Trench 2 context descriptions

Trench 2	Dimensions:	3x5m				
	Orientation:	NW-SE				
	Reason for trench:	Investigate a possible pit alignment seen in the geophysics				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
2001	Topsoil of trench 2. Colour: mid greyish brown. Composition: sandy silt. Compaction: dry, friable. Inclusions: moderate small to medium sub-angular to sub-rounded stone, evenly distributed.	Layer	Topsoil, consistent with agricultural ploughsoil			0.25 (avg.)
2002	Subsoil of trench 2.	Layer	Subsoil layer, similar to (2003) natural			0.05 (avg.)
2003	Natural of trench 2, firm, dry, mid-greyish brown sandy silt.	Layer	Natural. Patches of delaminated/friable shale bedrock protruded through the sandy silt. Determining subsoil or redeposited natural from true natural vs man-made feature infill was challenging. Discussion on site with Geraldine and Matthew Stroud confirmed this was typical of Boyne Valley deposits. Edges of larger cut features were identifiable by being cut directly into the bedrock.			
2004	Cut of N-S pit. Shape in plan: sub-circular. Break at top: gradual. Sides: stepped, concave, undercut. Break at base: sharp. Base: rounded.	Cut	Recut posthole/pit truncating pit c2010 (c2011).	0.92	1.02	0.95

Trench 2	Dimensions:	3x5m				
	Orientation:	NW-SE				
	Reason for trench:	Investigate a possible pit alignment seen in the geophysics				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
2005	Fill of pit [2004]. Colour: mid greyish brown. Composition: silt. Compaction: very dry, firm. Inclusions: occasional small sub-angular to sub-rounded spheroidal pebbles, evenly distributed.	Fill	Upper fill of pit	0.87	1	0.18
2006	Fill of pit [2004]. Colour: dark greyish brown. Composition: silt. Compaction: dry, firm. Inclusions: 1) occasional small sub-angular to sub-rounded spheroidal pebbles, evenly distributed 2) occasional flecks of angular to sub-angular elongate charcoal, evenly distributed.	Fill	Middle full of pit	0.76	0.67	0.35
2007	Fill of pit [2004]. Colour: mid brownish black. Composition: silt. Compaction: moist, malleable. Inclusions: occasional small sub-angular to sub-rounded spheroidal pebbles, evenly distributed.	Fill	Lower fill of pit c2004, charcoal content	0.62	0.66	0.45
2008	Cut of E-W pit. Shape in plan: sub-circular. Break at top: sharp. Sides: steep, concave. Break at base: gradual. Base: rounded.	Cut	See c2009	0.43	0.38	0.19

Trench 2	Dimensions:	3x5m				
	Orientation:	NW-SE				
	Reason for trench:	Investigate a possible pit alignment seen in the geophysics				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
2009	Fill of pit [2008]. Colour: dark brownish black. Composition: silt. Compaction: dry, firm. Inclusions: occasional flecks to small sub-angular platy charcoal, concentrated towards upper surface.	Fill	Fill of possible pit, subsoil around cut was oxidized, suggesting in-situ burning. Possible the feature represented a lens of burnt material on the surface of the subsoil. Edge of context indistinct, could represent vertical dissipation of a localized heat-event. Max depth could be only 0.08m. Shale was present to base of cut, gradually diminishing in concentration until absent when base was assumed at 0.19m.	0.43	0.38	0.19

Trench 2	Dimensions:	3x5m				
	Orientation:	NW-SE				
	Reason for trench:	Investigate a possible pit alignment seen in the geophysics				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
2010	Cut of NE-SW pit. Shape in plan: irregular, semi-oval. Break at top: gradual. Sides: steep, concave. Break at base: sharp. Base: rounded.	Cut	Large pit, recut/truncated by c2004 Identified in Tr2 at a location consistent with the geophysical survey location of an anomaly/feature within the possible pit-alignment group. Tr2 was located specifically to attempt to identify and characterize one of these large features. There are 26 similar features in the geophysical survey in total, with associated other features that may indicate secondary rows of pits/post-holes in the alignment. C2010 is a large, sub-oval, u-shaped cut, the edge is formed into the natural shale bedrock. Fill c2015 was identified at the lower northern edge of the cut, comprising a smaller percentage of the feature fill than c2011 (based on excavated extent) and c2015 appeared to be more homogenous redeposited natural. The surface of cut c2010 was difficult to discern against the surrounding natural, with the initially observed and recorded pre-ex extent of the feature being smaller than the actual post-excavation cut extent. C2010 contained a recut pit	1.95	> 1.20	0.93

Trench 2	Dimensions:	3x5m				
	Orientation:	NW-SE				
	Reason for trench:	Investigate a possible pit alignment seen in the geophysics				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
2011	Fill of pit. Colour: orangey brown. Composition: clayey silt. Compaction: very dry, firm. Inclusions: 1) occasional small to medium sub-angular to sub-rounded spheroidal pebbles, evenly distributed 2) occasional flecks to small sub-angular to sub-rounded elongate charcoal, evenly distributed.	Fill	Fill of put c2010. Very hard, compacted clay silt. Edge of context was defined against natural shale bedrock. Context was truncated by c2004, a pit or posthole inserted into the earlier feature (c2010).	1.15	> 1.00	0.93
2012	Cut of pit. Shape in plan: regular, sub-circular. Break at top: sharp. Sides: moderate, concave. Break at base: gradual. Base: rounded.	Cut	Cut of pit under west section of Tr 2. Identified on the alignment of the geophysics results with c2004 and c2010 but smaller and shallower than c2010. In plan was scored by a later plough furrow and associated with an irregular natural blob/spread of ploughsoil. Eastern edge was overcut into shale natural. Contained two fills based on interpretation of the half-section (c2013, 2014), although the interface between them was indistinct and they were sampled as one (Sample no 16)	0.6	> 0.60	0.33
2013	Fill of pit [2012]. Colour: blackish brown. Composition: clayey silt. Compaction: dry, firm. Inclusions: rare flecks of sub-angular to sub-rounded spheroidal charcoal, evenly distributed.	Fill	Upper, darker fill of pit on W edge of Tr 2	0.22	> 0.25	0.24

Trench 2	Dimensions:	3x5m				
	Orientation:	NW-SE				
	Reason for trench:	Investigate a possible pit alignment seen in the geophysics				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
2014	Fill of pit [2012]. Colour: mid greyish brown. Composition: clayey silt. Compaction: dry, firm.	Fill	Lower fill of pit at W edge of Tr 2 Was sampled on 17/97/23 but number of sample is uncertain	0.6	> 0.60	0.33
2015	Fill of pit [2010]. Colour: light brownish yellow. Composition: silty clay. Compaction: dry, firm. Inclusions: rare flecks of charcoal, evenly distributed.	Fill	Fill of c2010, identified within northern half of pit, to north of recut posthole c2004. Visibly different (less mixed) to c2011 which formed the bulk of the fill of c2010 in the southern half of the pit. The interface between c2004, c2011 and c2015 suggested a possible mixing of fills as might occur with a large timber post being removed from c2004 and causing mixing within the remaining fills, this is speculative.	0.5	> 1.00	0.84
2016	Cut of pit. Shape in plan: regular, circular.	Cut	Pit cut in SE corner of Tr 2. Unexcavated	0.6	0.6	
2017	Fill of pit [2016]. Colour: mid blackish grey. Composition: clayey silt. Compaction: dry, firm.	Fill	Unexcavated feature, possible pit	0.6	0.6	
2018	Cut of E-W pit. Shape in plan: regular, sub-circular.	Cut	Pit in Centre of S end of Tr 2. Unexcavated	0.6	0.6	
2019	Fill of pit [2018]. Colour: mid blackish grey. Composition: clayey silt. Compaction: dry, firm.	Fill	Fill of possible pit/posthole, likely part of a row/alignment with c2016, c2018 and c2020.	0.6	0.6	

Trench 2	Dimensions:	3x5m				
	Orientation:	NW-SE				
	Reason for trench:	Investigate a possible pit alignment seen in the geophysics				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
2020	Cut of pit. Shape in plan: irregular, sub-circular.	Cut	Unexcavated pit or posthole in Tr2, observed under the W edge of the site in SW corner. Forms a likely alignment with c2016 and c2018.	> 0.50	> 0.15	
2021	Fill of pit [2020]. Colour: mid blackish grey. Composition: clayey silt. Compaction: dry, firm.	Fill	Fill of unexcavated pit or posthole in Tr2, observed under the W edge of the site in SW corner. Forms a likely alignment with c2016 and c2018.	> 0.50	> 0.15	

Table 4. Trench 3 context descriptions

Trench 3	Dimensions:	5x10m				
	Orientation:	NW-SE				
	Reason for trench:	Investigate a possible causewayed enclosure				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
3001	Topsoil of trench 3. Colour: mid greyish brown. Composition: sandy silt. Compaction: dry, friable. Inclusions: moderate small to medium sub-angular to sub-rounded stone, evenly distributed.	Layer	Topsoil			0.35 (avg.)
3002	Cut of NW-SE ditch. Break at top: 1) E: sharp 2) W: gradual. Sides: 1) E: steep, straight 2) W: moderate, concave. Break at base: 1) E: sharp 2) W: gradual. Base: rounded, sloping towards E.	Cut	Cut of large ditch term	> 1.50	3.15	0.78
3003	Fill of ditch [3002]. Colour: light yellowish brown. Composition: clayey silt. Compaction: dry, friable. Inclusions: moderate flecks to large angular to rounded stone, evenly distributed.	Fill	Upper fill of ditch terminus	> 1.50	3.15	
3004	Cut of posthole. Shape in plan: circular. Break at top: sharp. Sides: vertical, concave. Break at base: gradual. Base: rounded.	Cut	Posthole with no organic matter to indicate post	17.4	16.5	19.2

Trench 3	Dimensions:	5x10m				
	Orientation:	NW-SE				
	Reason for trench:	Investigate a possible causewayed enclosure				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
3005	Fill of posthole [3004]. Colour: brown. Composition: clayey silt. Compaction: friable. Inclusions: occasional small sub-rounded some small stones, evenly distributed.	Fill	Fill of posthole	17.4	16.5	19.2
3006	Cut of posthole. Shape in plan: circular. Break at top: sharp. Sides: steep, concave. Break at base: gradual. Base: tapered.	Cut	Cut of a posthole	0.25	0.26	0.22
3007	Fill of posthole. Colour: mid orangey brown. Composition: clayey silt. Compaction: moist, friable. Inclusions: occasional flecks of elongate charcoal, concentrated towards top of the fill.	Fill	This is likely a posthole, with a pointed base. Little evidence of organic remains or wood, so perhaps the post was removed rather than decomposing in situ and the fill was formed through silting. It is close to the ditch terminus, but does not trÃºncate and is not truncated by any other features.	0.25	0.26	0.22
3008	Cut of ditch. Break at top: sharp. Sides: steep, concave. Break at base: imperceptible.	Cut	Partially excavated ditch terminus, donâ€™t trust the sides and it hasnâ€™t been bottomed due to limit of excavation	> 0.70	> 2.10	> 0.43
3009	Fill of ditch [3008]. Colour: dark orangey brown. Composition: silty clay. Compaction: moist, firm. Inclusions: moderate small to large	Fill	Not fully excavated fill of ditch	> 0.70	> 2.10	> 0.43

Trench 3	Dimensions:	5x10m				
	Orientation:	NW-SE				
	Reason for trench:	Investigate a possible causewayed enclosure				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
	angular to rounded stone, evenly distributed.					
3010	Fill of ditch. Colour: bright orangey brown. Composition: medium silty sand. Compaction: dry, friable. Inclusions: 1) occasional flecks to small charcoal, evenly distributed 2) occasional small angular to rounded stones, evenly distributed.	Fill	Basal fill of large ditch terminus. Mottled orange and brown, some charcoal flecks. Possibly slumping from an internal bank?	> 1.00	1.42	0.12
3011	Fill of ditch [3002]. Colour: very light greyish yellow. Composition: silty clay. Compaction: moist, firm. Inclusions: occasional small charcoal, evenly distributed.	Fill	Basal fill of ditch	> 0.90	1.35	0.16
3012	Cut of posthole. Shape in plan: circular. Break at top: sharp. Sides: steep, straight. Break at base: gradual. Base: uneven.	Cut	This is a likely small post hole or stakehole. There are coarse irregular stones in the base and in the half section which could be fill.	0.15	0.14	0.1

Trench 3	Dimensions:	5x10m				
	Orientation:	NW-SE				
	Reason for trench:	Investigate a possible causewayed enclosure				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
3013	Fill of posthole [3012]. Colour: orangey brown. Composition: clayey silt. Compaction: dry, friable. Inclusions: frequent small to medium sub-angular stones, concentrated towards base.	Fill	Fill of post or stakehole. A few small stones in fill sample	0.15	0.14	0.1
3014	Fill of ditch [3002]. Colour: mid greyish brown. Composition: silty clay. Compaction: dry, friable. Inclusions: moderate small to medium sub-angular to sub-rounded stones.	Fill	Secondary deposit in ditch [3002], probably represents a period of silting	>1.50	2.79	0.23
3015	Trampled ground of trench 3. Colour: light yellowish brown. Composition: sandy silt. Compaction: moist, firm. Inclusions: 1) moderate small to large sub-angular to sub-rounded stone, evenly distributed 2) occasional flecks to small charcoal, evenly distributed.	Layer	Trampled ground, possibly caused when the causeway between the two ditches were in use, a patch of burning was seen smeared between the two terminusâ€™s. Charcoal inclusions and the compact nature of the ground makes it feel like it was an old surface.	>5.00	>4.45	0.02 to 0.10
3016	Natural of trench 3. Colour: mid greyish black. Composition: degrading shale. Compaction: dry, friable.	Layer	Degrading shale bedrock	>5.00	>10.00	-

Trench 3	Dimensions:	5x10m				
	Orientation:	NW-SE				
	Reason for trench:	Investigate a possible causewayed enclosure				
Context	Description	Type	Interpretation	Length (m)	Width (m)	Depth (m)
3017	Spread of possible burning? [3018]. Colour: mid orangey red. Composition: clayey silt. Compaction: moist, friable.	Spread	A spread of burning seen under (3015), initially thought to be a linear feature after excavation it was seen to dive beneath (3015), and therefore the full extent of the layer is unknown	> 0.41	> 0.31	0.07
3018	Cut of possible cut of possible burni.	Cut	VOID - doesn't exist as a cut, is a layer			
3019	Spread of possible burning? Colour: mid orangey red. Composition: clayey silt. Compaction: moist, friable.	Spread	Same as (3017)			
3020	Voided Cut of E-W possible burning. Shape in plan: square. Break at top: gradual. Sides: shallow, concave. Break at base: imperceptible. Base: uneven.	Cut	VOID - doesn't exist as a cut	> 0.29	> 0.32	0.08
3021	Fill of ditch [3022]. Colour: light orangey brown. Composition: clayey silt. Compaction: moist, firm. Inclusions: occasional small rounded elongate charcoal, evenly distributed.	Fill	Fill of a ditch, not excavated in the 2023 field season but likely the outer ditch as seen in the geophysics	> 0.98	> 2.30	
3022	Cut of N-S ditch. Shape in plan: regular, linear.	Cut	Cut of a ditch, not excavated in the 2023 field season but likely the outer ditch as seen in the geophysics	> 0.98	> 2.30	

Appendix B: Human Remains

Table 5. Human bone catalogue

Trench	Context	Bone Element	Bone	Side	%	Age	Sex	Other
1	1008	Skull	Petrous portion	L	90	A	-	-
			Temporal fragment	L?	10	A	-	-
		Mandible	Coronoid process	L?	40	A	-	-
			Condyle	U/S	50	A		-
		Teeth	1st maxillary molar	R	100	A	-	Severe wear and flecks of dental calculus on buccal surface
			2nd maxillary molar	R	100	A	-	Severe wear and flecks of dental calculus on buccal surface
			Lateral mandibular incisor	R	100	A	-	Severe wear
			1st mandibular premolar	L	100	A	-	Moderate wear
			2nd mandibular premolar	L	100	A	-	Moderate wear
			3rd mandibular molar	L	100	A	-	Moderate wear
		Vertebrae	C7	R	50	A	-	Mild osteophytes on the right superior surface

Trench	Context	Bone Element	Bone	Side	%	Age	Sex	Other
			C2 (dens)		40	A	-	Mild osteophytes on the anterior surface of the dens
			Thoracic		50	A	-	Body of thoracic vertebrae with moderate osteophytes on the superior margin
			2x fragments, possibly from cervical vertebrae		30	A	-	
		Ribs	Neck	L	20	A	-	Severe osteophytes on the inferior articular facet
			Neck	-	10	A	-	
			Body	L	5	A	-	
		Clavicle	Shaft	L	80	A	-	
		Humerus	1x shaft fragment	U/S	50	A	-	Bone surface very degraded, possible rodent activity
			1 x head fragments	U/S	30	A	-	-
		Ulna	Shaft fragments x2	U/S	40	A	-	Surface of bone very degraded
		Femur	2x diaphysis fragments	U/S	20	A	-	-
		Patella		L	100	A		

Trench	Context	Bone Element	Bone	Side	%	Age	Sex	Other
		Feet	Calcaneus?	L	40	A	-	-
		Long Bone	50+ Unidentified shaft fragments	-	-			-
		Unidentified	0.8g of cremated bone.					
			Not possible to determine whether animal or human bone					

Appendix C: Small Finds

Table 6. Small finds

Number	Context no.	Trench	Description
1	3001	3	Worked quartz
2	3001	3	White flint poss blade/bladlet fragment
3	3001	3	Debitage
4	3001	3	Debitage
5	3001	3	Broken possible core fragment
6	3001	3	Flint chunk
7	3001	3	Possible scraper
8	3001	3	Flint
9	1001	1	Stone polishing tool
10	3001	3	Flint
11	3001	3	Flint (fragmented)
12	1001	1	Horse shoe
13	1001	1	Flint chunk (burnt)
14	1001	1	Flake
15	1001	1	Flint chunk
16	1001	1	Flint chunk
17	1001	1	Flake
18	1001	1	Burnt flake

Number	Context no.	Trench	Description
19	1001	1	Burnt flint
20	1001	1	Burnt flint
21	1001	1	Burnt flint
22	1001	1	Flake
23	3001	3	Large flint flake
24	1001	1	Flake
25	1001	1	Flake
26	3001	3	Large flake
27	3001	3	Flake
28	1001	1	Burnt flint chunk
29	1001	1	Burnt flint chunk
30	1001	1	Burnt flint chunk
31	1001	1	Flake
32	1001	1	Burnt flake
33	3001	3	Flake
34	3001	3	Flake
35	3001	3	Flake
36	1001	1	Flint chunk
37	1001	1	Flake
38	1001	1	Burnt flint chunk
39	1001	1	Flake
40	1001	1	Flake
41	1001	1	Burnt flint
42	1001	1	Flake
43	1001	1	Flake
44	1001	1	Flint
45	1001	1	Flake
46	3001	3	Flint chunk
47	1001	1	Flint
48	1001	1	Flake
49	3001	3	Flint chunk
50	1001	1	Flint
51	1001	1	Flint crumb
52	1001	1	Flake
53	1001	1	Flint
54	1001	1	Flake
55	1001	1	Flake
56	1001	1	Burnt flake
57	1001	1	Poss. Quartz flake
58	1001	1	Poss. Quartz flake
59	1001	1	Flint chuck

Number	Context no.	Trench	Description
60	1001	1	Flint
61	1001	1	Void
62	1001	1	Flint
63	1001	1	Flake
64	1001	1	Flake
65	1001	1	Flake
66	1001	1	Flake
67	1001	1	Flake
68	1001	1	Flint
69	1001	1	Flint chunk
70	1001	1	Flint
71	1001	1	Flint
72	1001	1	Flint
73	1001	1	Flake
74	1001	1	Flake
75	1001	1	Flake
76	1001	1	Flint chunk
77	1004	1	Flint
78	1004	1	Flake
79	1004	1	Pottery
80	1004	1	Flint
81	1004	1	Flake
82	1004	1	Flint crumb
83	1004	1	Flake
84	1004	1	Flake
85	1005	1	Flake
86	1004	1	Poss scraper
87	3001	3	Flint chunk
88	1001	1	Flint
89	1005	1	Flint
90	1006	1	Flint
91	3001	3	Flint
92	3001	3	Flint
93	1001	1	Flint
94	1001	1	Flint
95	1008	1	Plaque, copper alloy (?brass)
96	1001	1	Flint
96	1004	1	Flake
97	1001	1	Flint
97	1004	1	Burnt flake
98	1004	1	Flint

Number	Context no.	Trench	Description
99	1004	1	Flint
100	1008	1	lock
101	1004	1	Burnt flake
102	1004	1	Flint
103	1004	1	Flake
104	1004	1	Burnt flake
105	1004	1	Pottery
106	1006	1	Pottery
107	1006	1	Decorated Pottery
109	1001	1	Flint
110	1006	1	Flint
111	1004	1	Flake
112	1001	1	Flint

Appendix D: Environmental Samples

Table 7. Environmental Samples

Context no.	Feature	Fill of	Trench	Reason	Bags/Tubs	Volume (L)	Quantity (%)
2005	Pit	2004	2	Potential cremation/prehistoric feature	1	15	20
2006	Pit	2004	2	Charcoal and poss cremation	1	15	10
2007	Pit	2004	2	Charcoal content	1	15	35
3005	Posthole	3004	3	Bulk sample of 50% posthole for ecofact/artefact recovery and poss dating material	3	3	50
2009	Pit	2008	2	Possible prehistoric feature	1	4	50
3007	Posthole	3006	3	Bulk sample taken for ecofact/artefact recovery and possible dating	1	5	50
3013	Posthole	3012	3	Bulk sample taken for ecofact/artefact recovery and possible dating	1	2	50
1004	Ditch	1007	1	Fill of prehistoric ring ditch	1	20	1
3014	Ditch	3002	3	Bulk for ecofact and artefact recovery and for charcoal/burnt stuff for c14 dating	2	40	5
3017	Spread	3018	3	To determine if burning or natural deposit of reddish orange material	1	5	10
3019	Spread	NA	3	To determine if burned or natural deposit (spread)	1	5	10
3009	Ditch	3008	3	Bulk for c14	1	20	5
2011	Pit	2010	2	Fill of original (earlier) pit	1	15	5
1006	Ditch	1007	1	Fill of ditch with charcoal and pottery	1	5	3
3011	Ditch	3002	3	Bulk from basal fill for ecofacts and potential dating material	1	20	5
2014	Pit	2012	2	Possible prehistoric pit, seek characterization and dating evidence	1	5	25